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DID DUTCH COMPANY PENSION FUND
DECISION-MAKERS STEP UP
TO THE PLATE?

A retrospective reconstruction of decision-making processes during a financial
crisis situation within a number of Dutch company pension funds.

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Abstract

This study provides a view of the decision-making process of Dutch company pension funds. The success of this research was the exceptional granting of access to four cases. Lack of such access could very well be the reason why research of this nature has not been previously achieved. The financial health of pension funds, expressed by the coverage ratio, showed a decline in 2008. Research has shown that there is a relationship between decision-making processes and outcome. Were the processes appropriate to set up and maintain a sufficient coverage ratio?

A tailor-made conceptual research model has been developed and used as an analysis aid to research the TO BE situation based on legal requirements and factional documents and the AS IS situation based on empirical data. The model made it feasible to shed light on the implementation of good pension fund governance principles and decision-making process, which is a contribution to the current gap in research.

The research showed that there is a relationship between the implementation of pension fund governance principles and appropriate decision-making processes. It also showed that there is a relationship between an appropriate decision-making process and coverage ratio. Both conclusions are not statistically proven due to the lack of the statistical significance, but are qualitative analysed and confirmed in the conducted case studies. It is suggested to use the research model by supervisor or pension funds to establish the mismatch between the implementation of pension fund governance principles and decision-making processes to enhance the quality of decision-making processes and outcome.

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During one of his expeditions in search of glory and adventure riding his horse Rocinante, Alonso Quijano, better known as The Ingenious Gentleman Don Quixote of La Mancha (de Cervantes Saavedra, 1605) told his faithful squire Sancho Panza that the road was far better than the inn after a nagging night in a barn.

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1. Introduction and Background to the Research

1.1 Introduction to the Research

In 2007/2008 a financial crisis occurred (Benmelech and Dlugosz, 2009, Mishkin, 2009, Anonymous, 2009, Ryder and Chambers, 2009, Jones and Tsutsumi, 2009). Dutch pension funds suffered from huge investment losses. An example¹ is ABP - the pension fund for employees in the government, public and education sector.

The crash in equity prices, coupled with a dramatic decline of long-term interest rates used to discount liabilities, slashed pension funds' funding ratios hereafter referred to as coverage ratios. In the Netherlands the coverage ratio is legally defined (Minister van Sociale Zaken en Werkgelegenheid, 2006c) as the current market value of total assets divided by discounted pension liabilities. In the Netherlands the fall of the coverage ratio for the majority of pension funds required immediate attention and perhaps action by the pension funds, because the pension entitlements of millions of pension fund participants could be in danger. The coverage ratio is a number, which the supervisor uses to establish the financial health of the fund. The financial health of the pension institution depends on the promise made and the nature of the pension benefit. It also depends on the financial prospects of the pension fund over a certain time period. The central question regarding financial health can be stated as follows: To what extent is the pension fund able to live up to the communicated benefits, both now and in the future (Broeders et al., 2012)? In the Netherlands a reduction of the coverage ratio requires, also legally defined, (Minister van Sociale Zaken en Werkgelegenheid, 2006c) action (so-called 'herstelplannen' or Recovery Plans) by the decision-makers, which can lead to turmoil among

¹ "One of the biggest funds in the world ABP said its coverage ratio had fallen by over a quarter. Their, some 2.1 million clients, lost 16 billion euros in the financial crisis. Its coverage ratio dropped from 126% to 92% in the fourth quarter 2008. The fund wrote off 22 billion euros (29 billion U.S. dollars) because of the financial crisis" ANONYMOUS (2009) Dutch pension funds hard hit by financial crisis. *Asia News Monitor*.

pension fund participants. The situation for Dutch pension funds per period of a quarter is shown in Figure 1-1.

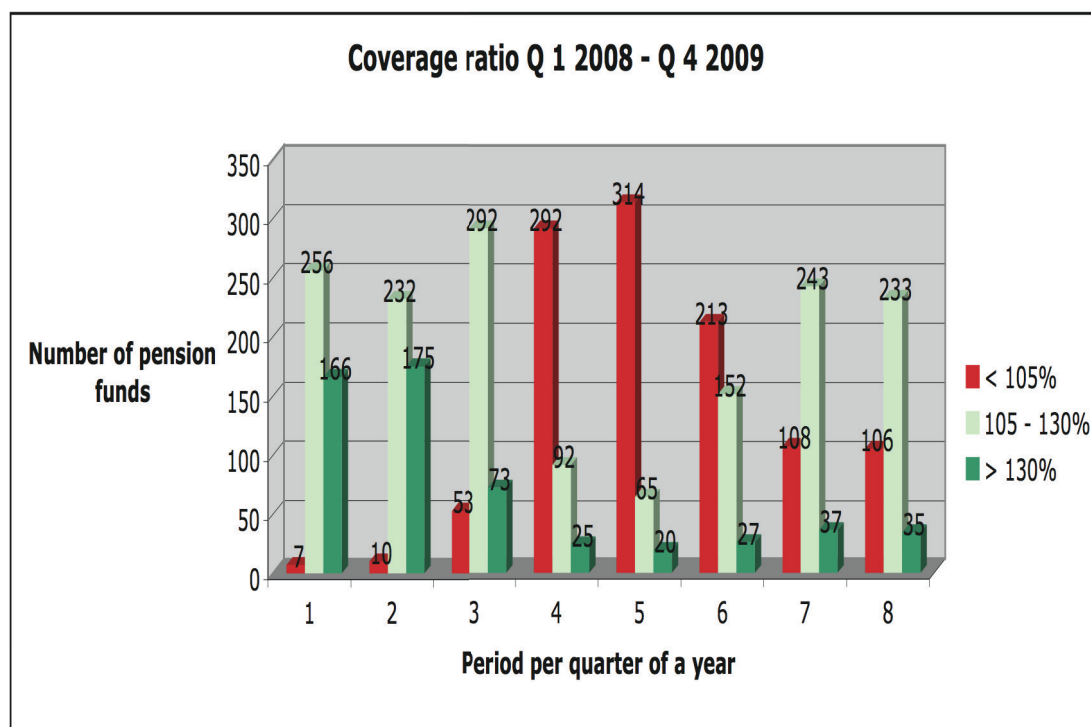


Figure 1-1: Coverage ratio Q1 2008 - Q4 2009. (Source: DNB <http://www.statistics.dnb.nl/financieele-instellingen/pensioenfondsen/toezichtgegevens-pensioenfondsen/index.jsp>; accessed 22-05-2012).

Figure 1-1 shows the decline of the three different levels of coverage ratios. The definition of coverage ratio as well as the different levels are based on law (Minister van Sociale Zaken en Werkgelegenheid, 2006c). See section 2.6.5 for more in-depth information about the coverage ratio and different levels. In short the levels of coverage ratio shown in Figure 1-1 are:

- 1st Level: has a coverage ratio lower than 105%, which are the minimum regulatory own funds. This level of coverage ratio is the minimum required by law.
- 2nd Level: has a coverage ratio between 105% and 130%, which are the regulatory own funds above the minimum. The funds in this group have a reserve deficit.
- 3rd Level: has a coverage ratio higher than 130%.

1.1.1 Coverage Ratio as Agenda Topic for Board Meetings

Pension fund boards need to be prudent and risk-aware. There are several reasons for these obligations. To start, these obligations are laid down in the Pension Act (Minister van Sociale Zaken en Werkgelegenheid, 2006c).

Secondly, taking into consideration that a fall of 1% in the interest rate causes an increase of around 15 % of the liabilities to occur (van Praag, 2009). The developments under review resulted in a decrease of the coverage ratio of an average of 121% in Q3 2008 to an average 92% in Q1 2009. In 2008 alone, the market value of total pension assets in the Netherlands dropped by more than 17%. Together with the impact of lower discount rates, the crisis caused the coverage ratio to fall in 2008 by no less than 49 percentage points (de Dreu and Bikker, 2012).

Thirdly, this financial crisis was the seventh in a row over the last 20-25 years.

Number	Year	Name
1	1987	Crash of the stock market.
2	1994	The Mexican peso crisis.
3	1994	Decline of the European bond market following a huge rally in 1993.
4	1997	Asian currency exchange market.
5	1998	The Russian rouble crisis, which led to the bankruptcy of the hedge fund LTCM. This caused an enormous shock on the financial markets.
6	2002	The so-called Internet bubble crisis (bankruptcy of WorldCom and others) causing an extreme downturn of stock markets.
7	2007	Banking crisis, which began with the bankruptcy of Northern Rock followed by huge depreciation of mortgages by Merrill Lynch, Citibank, UBS, Swiss Re, Bear Stearns, Fannie Mae, Royal Bank of Scotland, UBS and the bankruptcy of Lehman Brothers in September 2008.

Table 1-1: Financial crises 1987 – 2008.

In the IOPS report (International Organisation of Pension Supervisors, 2006) it is documented that pension funds should have clearly documented procedures for decision-making, with processes for referring decisions up to the appropriate level of seniority, reviewing and documenting decisions. In a crisis situation it is possible that the process is repeated at a higher frequency or with different topics on the agenda, but the process should be clear and only adjusted

when required by the situation. So, the question was: Did Dutch company pension fund decision-makers step up to the plate? Were they prudent and risk aware? Did the agenda of board meetings cover the topic of coverage ratio? Was the process of decision-making set up in such a way that the topic could come up in board meetings? Janis and Mann (1977) describe the decision making process in an environment of conflict, choice, and commitment and provide four basic questions which should be raised so decision-makers have a better chance of attaining their objectives. Those questions are:

1. Are the risks serious if I/we don't change?
2. Are the risks serious if I/we do change?
3. Is it realistic to hope in finding a better solution?
4. Is there sufficient time to search and deliberate?

1.1.2 Decision-Making Process

Despite previous crises and actions taken, looking at Table 1-1, one could consider that something went wrong. Due to the turmoil many publications concerning the decline in coverage ratio appeared. Although they had one question in common - Where did it go wrong? - publications came up with a variety of answers, including:

1. Incompetence of the board (Frijns et al., 2010).
2. Lack of risk management ('t Hart, 2009).
3. Too much reliance on the use of models (Brouwer, 2009).
4. Too positive assumptions (De Nederlandsche Bank, 2011b).
5. Shortcomings in governance and outsourcing (De Nederlandsche Bank, 2011b).

Due to the variety of answers given in publications one could consider that boards of pension funds are insufficiently prepared to cope with crises. Perhaps the decline of the coverage ratio was a combination of the answers given above, although none of the publications even suggested this as a possibility. None of the publications either highlighted or investigated the decision-making process. An appropriate decision-making process could shed light on mismatches or indicate room for improvement to prevent ineffective decisions to

be made. An appropriate decision-making process takes into account various kinds of information, technical data and knowledge, like:

1. Details about the problem, which requires a decision.
2. The stakeholders involved and their objectives and policies.
3. The influences affecting the outcome like legal requirements.
4. The do's and don'ts of pension fund governance.

The argument that decision-making processes matter rests on two assumptions (Dean and Sharfman, 1996). The first is that different processes lead to different choices. The second assumption is that choices relate to outcomes. Therefore, an appropriate decision-making process perhaps will not always lead to a desired outcome but it should be feasible to explain why the outcome is as it is. During the crisis the Government installed two committees with specific assignments. One committee was asked to investigate the investment policy and risk management of pension funds. This committee is known as Committee Frijns (Frijns et al., 2010). The other one was asked to investigate the future proofing of supplementary pension schemes. This committee is known as Committee Goudswaard (Goudswaard et al., 2010). Not one of the Governmental Committees or other bodies investigated either the decision-making processes or procedures within Dutch pension funds. To arrive at an appropriate decision-making process a conceptual model will be developed. This conceptual research model will be used to analyze the decision-making process concerning the maintenance of the coverage ratio within a sample of Dutch company pension funds. The process shows how those decisions were established. The conceptual research model makes it feasible for other pension funds around the world to investigate their decision-making process because it is a generic model. However, the applicable questionnaires should be tailored to the applicable law and content of the factional documents. In section 2.2 a more in-depth review of decision-making is conducted. For the purpose of this study, structured qualitative interviews with managers/directors and board members, as well as research questionnaires were used as a means of data collection. This usage of organizational leaders (board members and directors as "key respondents") is relatively widespread in strategy research (Snow and Hrebiniak, 1980, Bowman and Ambrosini, 1997).

1.2 Research

This section provides an overview of the gaps in the current literature, which is explored in greater detail in chapter two, and the resulting importance of this research to the field of decision-making. There is literature available in which decision-making of pension fund decision-makers is (partly) researched (O'Barr and Conley, 1992, Ambachtsheer et al., 1996, 1998b, 2005, 2006, 2007, Clark et al., 2006, Clark and Urwin, 2008). They all had a different perspective. Ambachtsheer et al. (1996, 1998b, 2005, 2006, 2007) conducted research and wrote many articles about pension funds and their governance based on their longitudinal research. Ambachtsheer et al. (1996) designed a survey that was answered by 50 senior pension fund executives in December 1994 during a symposium titled "Excellence in Pension Fund Management: What Is It?" Asked to estimate the 'excellence shortfall' in their organizations, the median response was a material 66 basis points. Asked to identify the sources of excellence shortfall, the respondents had the opportunity to select predefined causes. Three causes mentioned most frequently were the poor decision processes (98%), inadequate resources (48%), and lack of focus or mission clarity (42%). Clark et al. (2006) reported the results of an analysis of pension fund trustee competence in solving problems relevant to their investment responsibilities. They found the problem-solving capabilities of pension fund trustees in the U.K. "surprisingly heterogeneous" with potentially significant implications for pension fund governance. Clark and Urwin (2008) wrote about preferred styles for decision-making. Studies (Blake et al., 1999, Tonks, 2005) are available about investment decisions.

1.2.1 Gaps in Existing Research

There are two main gaps in the research and literature, which this study aims to address.

1. The first gap is the lack of research into the manner in which pension funds arrive at appropriate decisions.

To establish whether a decision is appropriate or not calls for an assessment of its consequences. This poses several difficulties. As March (1994) noted, decision-makers lament what they can not do and do things they are not willing to talk about. Also, managers often act without recognizing the outcomes of their actions (Starbuck, 1983). Even when outcomes are observed, determining their consequences can be difficult because it can be hard to separate the good from the bad outcome (Nutt, 1998). For instance, outcomes that serve an individual's interest may be seen as good; those that do not, as neutral or bad. That the process of decision-making is important and related to the success of a decision is shown in a study (Dean and Sharfman, 1996). They concluded that their results indicate that decision-making processes are indeed related to decision success. This underpins the results of Ambachtsheer et al. (1996) which showed the relation between excellence shortfall and poor decision-making processes. Given the lack of information about the situation within Dutch company pension funds it is possible that they also may suffer from poor decision processes or lack of focus or mission clarity. Taking this into account there could be a relationship between governance (the principles or rules to which the behaviour must meet) and the empirical decision-making process. For example, there are no norms for either appropriate decision-making processes or for good governance; they are both principle and not rule based. In summary, there is much literature available, which stresses the importance of decision-making processes, but no research or literature on the way pension funds might arrive at decisions.

2. The second gap is the lack of research into decision-making processes specifically within Dutch pension funds. This gap can be seen as a derivative of the previous one.

Here is a close relationship with the previous defined gap, however, focused on the situation in the Netherlands. There is literature available, commissioned mostly by the Dutch supervisor (Bikker and de Dreu, 2006, Rooij et al., 2007, Davis et al., 2007, Broeders and Chen, 2008, Heeringa, 2008, Dreu and Bikker, 2009, Broeders and Chen, 2010, Haan and Jansen, 2011). The topics covered vary from pension regulation and the market value of pension liabilities

(Broeders and Chen, 2008) to corporate culture and behaviour (Haan and Jansen, 2011). However, prior to this, no literature was available on decision-making processes in Dutch pension funds. So an in-depth understanding of these processes is lacking - both the more distant, abstract world of academia and the financial world in which these processes play out. Given the lack of similar empirical studies in Dutch company pension funds it will contribute to existing research. The paucity of empirical research to date leaves considerable knowledge gaps in pension fund decision-making processes.

1.2.2 The Research Objective

As justified in the previous sections, this study addresses the decision-making processes within Dutch company pension funds. The objective of this research is:

Development of a decision-making process model for appropriate decision-making within pension funds.

The link between decision-making processes and adequacy has not yet, been so convincingly demonstrated and substantial discussion in the literature has focused on the question of whether managerial processes matter (Hitt and Tyler, 1991). The argument that they do rests on two assumptions (Dean and Sharfman, 1996). The first is that different processes lead to different choices. The second assumption is that choices relate to outcomes.

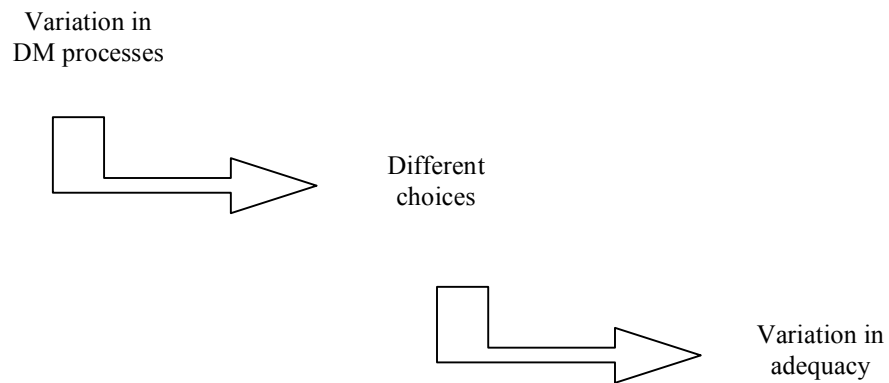


Figure 1-2: Assumptions underlying the decision-making process and adequacy relationship.

1.2.3 Propositions

The possible relationships between the implementation of pension fund governance principles, appropriate decision-making processes and outcome bring the following propositions to be researched:

Proposition P1: The implementation of pension fund governance principles leads to an appropriate decision-making process.

Pension fund governance principles (Stichting van de Arbeid, 2005) provide a framework for careful management, accountability, internal supervision, expertise, openness and communication. The aforementioned principles encompass the guidelines to which the board should comply and is an overview of do's and don'ts. Implementing the principles leads to an appropriate decision-making process. The process is the actual behaviour of the board and it should be a reflection of the do's and don'ts. Ambachtsheer et al. (1998a) found that there is a correlation between good governance and pension fund excellence. In the IOPS report (2006) there is a suggestion for the supervisory authority that they should adhere to its own governance code and should be accountable. The suggestion is made that their governance code should outline internal controls, checks and balances, and effective processes for risk and performance management. There should be clearly documented procedures for

decision-making. To date, pension fund governance has not garnered the same kind of research attention as corporate governance. Yet, the process of decision-making and governance is important for pension funds. In a brochure (De Nederlandsche Bank, 2010b) about the supervision themes in 2010 the Dutch supervisor acknowledged² this.

Proposition P2: An appropriate decision-making process leads to a legally required minimum coverage ratio.

P2 investigates the relationship between the appropriate decision-making process including the actual behaviour of the board and the outcome in terms of decision.

1.2.4 The Research Problem

Due to the small sample size of participating organizations in this study, it is impossible to calculate a Pearson's correlation, which is statistically significant. However, when both propositions seem to be true after a qualitative analysis it underpins the results of Ambachtsheer et al. (1998a) for the participating organizations and proof that the model is a tested aid to analyze the decision-making processes. To achieve the objective of the study and to test the propositions this study investigates the following research problem:

How was the decision-making process regarding the coverage ratio structured within the participating Dutch company pension funds during the period Q3 and Q4 2008 and in Q1 2009?

² Translated by researcher: "It is very important that pension funds give a good interpretation of the requirements of pension fund governance. The DNB will hold the functioning of the governorship principles against the light by, among other things, giving attention to the preparation and production of decisions." DE NEDERLANDSCHE BANK (2010b) Thema's DNB toezicht 2010. Amsterdam, De Nederlandsche Bank.

The research period is chosen because the significantly severe drop of the coverage ratio (see Figure 1-1) took place during that timeframe. Since the Dutch Central Bank in 2004, became responsible for the supervision of Dutch pension funds, such a relapse of coverage ratio has not taken place. An answer to the research question requires investigation into factors that are perceived to have an impact on the process and outcome. Those factors are part of the developed conceptual research model (see Chapter 3). The conceptual research model will serve as a standard for the study of the decision-making process. The aforementioned phases also shed light on the governance aspect of decision-making. The data is gathered from a sample of Dutch company pension funds, their board members and management.

1.2.5 Contribution of the Research

As mentioned one gap and one derivative gap in existing research can be addressed. It therefore intends to add to the non-existing research work carried out in pension funds. The resulting importance of this research can be viewed from the intended literature and managerial contributions of this research. Every pension fund participant would like to have income security when they retire. Therefore, pension funds boards are supposed to prudently take care of the invested assets to pay the pension entitlements. Because the board of pension funds is responsible for the financial well-being of the fund, they should maintain control of the financial situation of the funds (Pensioenfederatie, 2010, De Nederlandsche Bank and Stichting Autoriteit Financiële Markten, 2012). Were they in control? Despite previous crises and actions taken, based on knowledge and advancing insight looking at Figure 1-1, one could consider that something is not properly organized yet. This study will contribute to the lacking solution.

1.2.6 Intended Theoretical Contributions

The intended theoretical contribution is to describe a new process model, based on literature research (Mintzberg et al., 1976, Simon, 1979, Dean and Sharfman, 1993, Rastegary and Landy, 1993, Langley et al., 1995, Reyna and Rivers, 2008), law, practice reflected in factional documents as a process model for pension funds' decision-making, since this is not available at the moment. This model will be applied to several different cases. According to the studied literature (Kahneman et al., 1982, Thompson, 2004, Dror and Fraser-Mackenzie, 2008) it is important that the measure of biases like commitment and trust draw attention to how things can go wrong. Therefore a small number of questions will be included in the questionnaire regarding this issue. It is not the intention to elaborate on it. O'Barr and Conley (1992) concluded based on observing behavior at nine major US pension funds over a two year period, that the aim of pension fund governance appeared to be focused more on responsibility deflection and blame management than on good governance and creating value for fund stakeholders. They found that strong personal relationships with consultants and investment managers seem to be a top priority for pension fund board members. Elements of commitment and trust are therefore included as part of the questionnaire. The model can help to identify any potential shortcomings in decision-making processes.

1.2.7 Intended Managerial Contributions

The managerial contributions encompass three levels:

1st Level: Board of the participated company pension funds. It is anticipated that the case descriptions will give answers to questions which make it possible that the board will end up in an undesirable situation as a result of their directors' liability. Due to the fact that the board of the company pension fund is jointly and severally liable for the consequences of the decisions, it is of great importance to the board that they can justify their decisions upfront and after the event.

2nd Level: Information dissemination. Public dissemination of anonymous research information in the form of publications or presentations will only take place after written consent of the participating organizations. Before disseminating anonymous research information, the participating organization will receive a document and verbal explanation covering recommendations on how their situation attributed (possible found) shortcomings can be addressed.

3rd Level: Supervisor. The supervisor will be contacted to discuss the outcome of the research. The purpose is to set up, in collaboration with the supervisor, a number of new research questions, the results of which will benefits the board of pension funds rather than only the supervisor.

1.3 *Structure of the Thesis*

Figure 1-3 below is a graphical overview of the structure of the thesis.

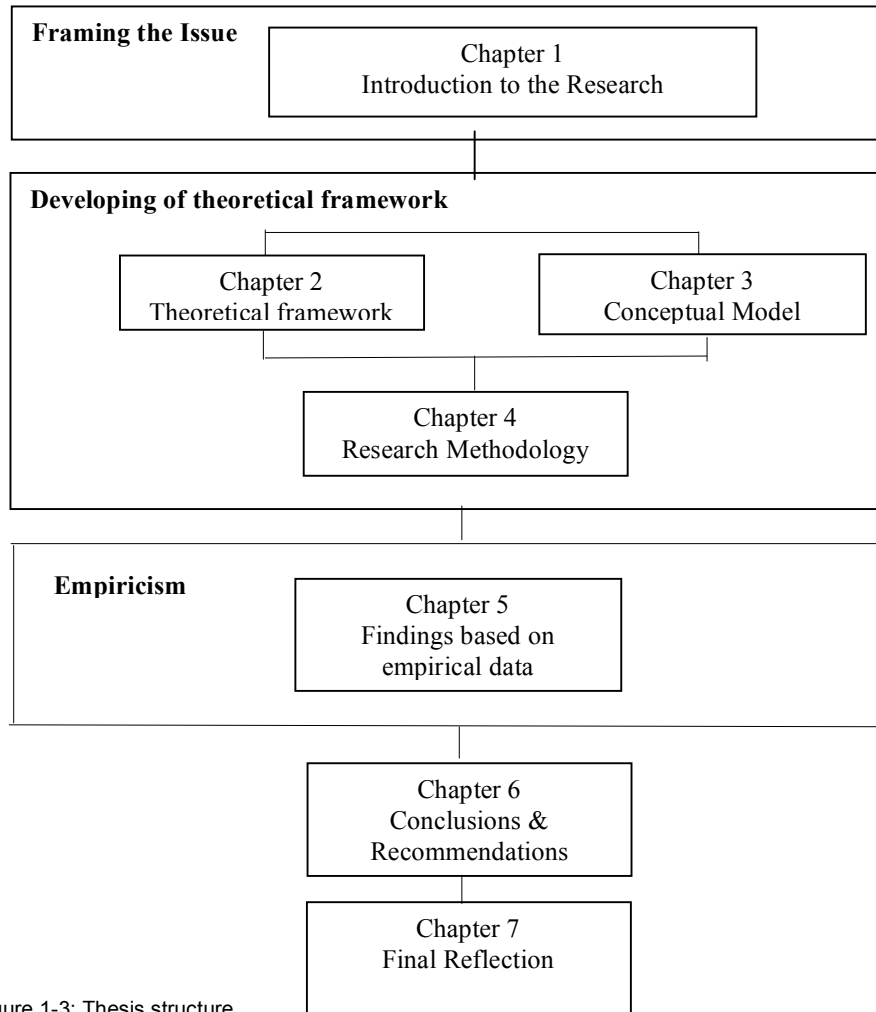


Figure 1-3: Thesis structure.

Chapter 1 provides the introduction and the background of the research. Chapter 2 discusses themes in the literature on decision-making. In Chapter 3 the conceptual research model, and it's grounding in the literature is explained. Chapter 4 extrapolates the research methodology to be used during the empirical research. Chapter 5 contain the results and findings of the research per case as well as cross-case comparison. Chapter 6 discusses the conclusions and recommendations. The final chapter of the thesis provides a final reflection on the study. This chapter was added because after the research period a new financial crisis occurred, the sovereign debt crisis, again with

implications for the coverage ratio of Dutch pensions funds. The chapter will therefore focus on the status of the developments up to 17 September 2012, the date of submission of the thesis.

2. Construction of Theoretical Framework

2.1 Introduction

This chapter reviews the themes, which are related to the research problem as stated in the previous chapter. Table 2-1 provides an overview of the core and peripheral literature that is discussed.

Central to the research	Peripheral to the research
Theoretical underpinning. Linking phases of the decision-making process.	Biases as an element in the process. Pension fund universe. Applicable legislation and supervision.

Table 2-1: Overview of reviewed literature.

This review is necessary for the development of the conceptual research model in Chapter 3. The intention is to identify elements that play a role in the decision-making of pension funds about the coverage ratio. Often decisions are developed in a somewhat chaotic manner, evolving from on-going confrontations among the preferences of the different participants. It is this playing out of these confrontations and interactions - under the various compensating and amplifying effects of the system - that constitutes what we call the decision-making process. Research at the individual level has linked cognitive processes to decision outcomes (e.g., (Bazerman, 1990). For example, decisions suffer if people use cognitive anchors (Tversky and Kahneman, 1974) or try to justify previous choices (Staw, 1981). Group decision-making processes also influence performance (Guzzo, 1986, Hackman, 1991). Janis (1982) demonstrated how processes such as rationalization threaten decision success.

2.2 *Theoretical Underpinning*

The theoretical underpinnings for this research will focus on the decision-making theories and which to choose and the consequences of this choice for the development of the model.

2.2.1 Different Views/Theories on Decision-Making

In decision-making there are two major approaches. On the one hand there is the normative or prescriptive approach. The core is optimization, rational and complete information. On these assumptions theories and models are developed. Description focuses on how we make decisions and the underlying reasons for such behaviour. Prescription considers how we should make decisions with a view to improving the quality of decision-making, both in terms of process and outcome (Doyle Corner et al., 1994). In the 1940s two important theories were developed. Von Neumann and Morgenstern (1944) developed a theory of games and economic behavior known as the Game theory, a prescriptive theory. Simon (1947) developed the theory of the Bounded Rationality, which is a descriptive theory. Along this rational/irrational spectrum, some theorists believe that there is one best way to make decisions; others believe that the best way depends on the particular situation one faces. Making a decision implies that there are alternative choices to be considered. The objective is to choose that alternative which has the highest probability of success or effectiveness and therefore best fits the goals to be achieved. The distinction and the gap between prescription and description are important and reflect the different perspectives adopted by Psychology and Management Science research communities. Another perspective is to consider decision-making as part of a process. The result of the process is a decision, which can be built on prescriptive or descriptive elements, or partly prescriptive and partly descriptive elements.

2.2.2 Prescriptive or Normative Decision-Making Theories

These theories assume an ideal decision maker who is fully informed, able to compute with perfect accuracy and fully rational. An example of a prescriptive theory is the Game theory as developed by Von Neumann and Morgenstern (1944). Prescriptive theories see decision-making processes aiming towards the improvement of the quality of decision-making, both in terms of process and outcome (Doyle Corner et al., 1994). The assumption of rationality provides a convenient theoretical core. The decision-making process of such a rational individual, group of individuals or organization has these characteristics:

1. An identification and listing of all the alternatives.
2. The determination of all the consequences resulting from each of the alternatives.
3. The comparison of the accuracy and efficiency of each of the consequences into a
4. Consistent preference ordering and
5. A decision rule.

These characteristics lead to what is called hyper-rational decision-making. The question is, is this theory realistic? Can decisions be made like this in real life? Due to the fact that in the area of research people and groups of people with different interests are involved, it is really doubtful whether this type of decision-making occurs. It is feasible that it occurs in certain parts of the decision-making process, but not for the entire decision-making process. Many economic models assume that people are hyper-rational, and would never consciously choose to do anything that would disadvantage them. However, research by Kahneman and Tversky (1972) has shown that this was clearly not the case.

2.2.3 Descriptive Decision-Making Theories

In the descriptive approach an attempt is made to describe people's real-life decision-making processes. Because decisions are not always made in a rational manner, descriptive theories see it as beneficial to describe what actually happens, and not just which decision should be made if the decision-

maker weighed the pros and cons rationally. The value of recording actual human behaviour, for example when people do not optimize their capabilities, is a basic assumption on which descriptive theories are based. Simon wrote many articles on the topic over the course of his life, mainly focusing on the issue of decision-making within the behaviour of what he termed “bounded rationality” (Simon, 1947). Bounded rationality is a term used to designate rational choice, which takes into account the cognitive limitations of both knowledge and cognitive capacity. The Garbage Can model (Cohen et al., 1972) disconnects problems, solutions and decision-makers. It was suggested that organizations tend to produce many “solutions” which are discarded due to a lack of appropriate problems. However, problems may eventually occur for which a search of the garbage might yield fitting solutions. Amos Tversky and Daniel Kahneman (1982) demonstrated in various experiments in distinct and replicable ways in how human judgment and decision-making differ from the rational choice theory. The results of the experiments led to the development of the Prospect Theory as an alternative. The Prospect Theory states that people make decisions based on the potential value of losses and gains rather than the final outcome, and that people evaluate these losses and gains using certain heuristics. The heuristics are mental short cuts, for instance using how readily or vividly something comes to mind as an indication of how often or how recently it was encountered. Daniel Kahneman (2003) proposes bounded rationality as a factor to overcome some of the limitations of the rational-agent models in economic literature. In *Models of my Life* Simon (1996) points out that many people are only partly rational, and are in fact emotional or irrational in the remaining part of their actions. This shift from the fully rational human being towards a living creature whose ultimate goal is to achieve satisfactory decisions is an enormous development in theory. The descriptive perspective, while rich in its description of real behaviour, is often context-dependent (in respect of both decision-making context and decision-maker cognition), thereby limiting its applicability for prescription beyond that context. Gigerenzer and Selten (2002) argued that most decision theorists who have discussed bounded rationality have not really followed Simon's ideas. Rather, they have either considered how people's decisions might be made sub-optimal by the limitations of human rationality, or have constructed elaborate optimizing

models of how people might cope with their inability to optimize. They instead proposed examination of simple alternatives to a full rationality analysis as a mechanism for decision-making. One should realize that many decisions are made without much conscious thought, such as impulse buying by consumers. The knowledge that the working capacity of the unconscious is approximately 200,000 times as large as the conscious (Dijksterhuis, 2007) could provide new insight into decision-making processes. In decision-making there is always an underlying assumption. Are people striving for maximizing the optimal result or are they pleased with satisfying decisions? The cost of collecting the information to decide is often neglected (DeMiguel et al., 2007). DeMiguel posit that there is a sample threshold at which complex rules outperform simple ones is in excess of 3000 months. This is data covering approximately 250 years. Current research (Gigenrenzer and Brighton, 2009) has shown that people look more and more for heuristics simple decision rules. Those simple decision rules speed up the process of finding a satisfactory solution; mental short cuts are used to ease the cognitive load of decision-making. Those simple rules are: rule of thumb, an educated guess or common sense. That simplicity can lead to better decisions is shown by research (McCammon and Hägeli, 2007, Snook et al., 2005).

2.2.4 Decision-Making Process Theories

When studying practical examples of the process of decision-making, it becomes clear that the process consists of a number of phases. The result of this process is a decision. As decision-makers have to make decisions about how and when to decide, Rubenstein (1998) proposed modelling the process by explicitly specifying decision-making procedures. Today, given the complexity and rapidly changing nature of social, cultural, and business environment, experts recognize that managers do not make all of their decisions using time-consuming logical and rational decision-making processes, but rather make many of their most important decisions instantly and intuitively. Intuitive decision making (Gilovich et al., 2002) works best when managers allow themselves to instantly recognize cues as patterns, which in turn allow them to act based on

their past experience. In short, action is based on intuition and intuition is based on instantly recognizing and evaluating prior experiences. According to Simon (1947), managers make choices based on simplified rather than real situations. This 'subjective rationality' narrows and alters the objective facts. The literature (Mintzberg et al., 1976, Dutton and Jackson, 1987) shows that managers tend to classify issues into a limited number of categories such as crisis, opportunity, uncertainty, and pressure. The classification affects both subsequent information processing and the motivations of the decision-makers. Looking at the articles considering the decline of the coverage ratio all the authors classified the difficulties differently. Plagued by uncertainties people would not take irreversible decisions (Janis and Mann, 1977). A study by Papadakis and Lioukas (1996) claimed that crisis situations seem to affect the decision-making process differently than pressure situations. Crisis situations trigger internal political activities during the decision-making process. Decisions posing pressure seem to be subjected to the formal rules. Based on that relationship it is feasible that by presenting issues as clear and non-threatening, management may succeed in eliminating political debates and problem-solving dissension among participants. Many efforts in the field of decision-making attempt to describe the process as a sequence of steps or phases (Mintzberg et al., 1976, Fredrickson, 1985). Decision-makers always act based on inadequate and incomplete knowledge (Brunsson, 1982, Adler and Gundersen, 2008). Decision-making is the process of sufficiently reducing uncertainty and doubt about alternatives to allow a reasonable choice to be made from among them. To this end the process can consist of prescriptive and descriptive elements. This definition stresses the information-gathering function of decision-making. It should be noted here that uncertainty is reduced rather than eliminated. Very few decisions are made with absolute certainty because complete knowledge about all the alternatives is seldom possible. Thus, every decision involves a certain amount of risk. If there is no uncertainty, you do not have to make a decision. A critical factor that decision theorists sometimes neglect to emphasize is that in spite of the way the process is presented on paper, decision-making is a nonlinear, recursive process. That is, most decisions are made by moving back and forth between the choice of criteria (the characteristics we want our choice to meet) and the identification of alternatives

(the possibilities we can choose from). The alternatives available influence the criteria we apply to them, and similarly the criteria we establish influence the alternatives we will consider. Another important theorist in the area of decision-making theories is Lindblom (1959). He created the theory of Muddling through. His work is a mixture of descriptive and process elements. The process approach takes into account the conflict of interests and the number of different stakeholders. All these elements can become important because in Dutch company pension funds a number of different stakeholders are involved (see Appendix A.) procedures can be described and human beings are involved. With this in mind, the conceptual research model (see Chapter 3) was developed, adopting the process approach, which encompass all these elements.

2.2.5 Linking the Phases of Decision-Making

In most of the process models at least three basic (groups of) activities are distinguished: problem identification, generation of alternative solutions, and evaluations of alternatives (Noorderhaven, 1995). This brings us to his conceptual model in Figure 2-1.

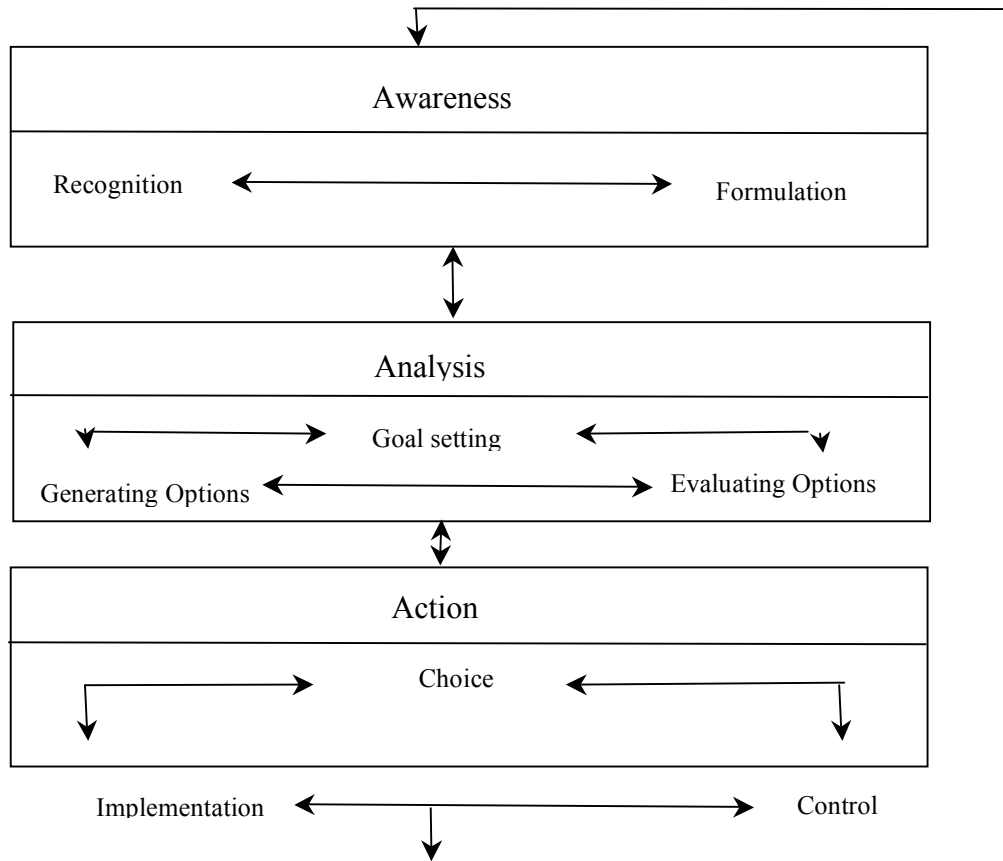


Figure 2-1: A conceptual model of organizational decision-making (Source: Noorderhaven 1995).

Not all situations will trigger an elaborate process as presented in Figure 2-1. In general, a decision is the product of an interaction between an individual's preferences and those of others. In many cases the final decision will not be the responsibility of or influenced by single individuals. It could involve what is called entities such as an elected or appointed body, cabinet officials, a board of directors, a personnel department, a trade union (Roy, 1996). It is feasible that in reality, the comprehensive process of decision-making could be developed in a somewhat chaotic manner, evolving from on-going confrontations among the preferences of the different participants. It is this playing out of confrontations and interactions, under the various compensating and amplifying effects of the system that make up what we call the decision-making process. For the development of the conceptual model the phase of availability of information is added. This is done because this is required by legislation and pension fund governance principles.

2.3 *Biases and Other Background Information*

2.3.1 Biases

The decision making process is dependent on a variety of factors, which may influence the making of the decision. Biases are one of these factors, which are elaborately discussed by a body of literature (Langer, 1975, Langer and Roth, 1975, Kahneman et al., 1982, Hogarth, 1987, Thompson, 2004, Dror and Fraser-Mackenzie, 2008). When biases creep into the decision-making process, the result is not the most optimal decision. Biases like selective search for evidence, wishful thinking, choice-supportive biases, or the illusion of control influence the decision-making process tremendously. Experiments of Kahneman and Tversky (1984) show that the biases that they identified are at least partially the result of problem solving with the use of mental short cuts, i.e. using how readily or vividly something comes to mind as an indication of how often or how recently it was encountered. Dror (2005) pointed out that biases and distortions arise from a long and thoroughly studied list of cognitive and psychological phenomena (Hogarth, 1980, Nisbett and Ross, 1980, Kahneman et al., 1982, Evans, 1989, Gilovich et al., 2002). These well-established cognitive and psychological phenomena cause people to lose objectivity. Some of these phenomena are confirmation bias, cognitive dissonance, self-fulfilling prophecies, motivated reasoning, and escalation of commitment. These can all influence a person's ability to recognize problems (Drummond, 1996, Keil et al., 2007, Chulkov, 2007). Therefore, after choosing the process approach for developing the conceptual research model, biases need to be taken into account. In the context of this thesis, the following biases have been selected:

1. Time constraints.

Time constraints can provide pressure, which can influence the results and outcome of the process. This element is taken into account because there was an enormous time pressure involved. The coverage ratio declined very rapidly. Perhaps a swift reaction was necessary.

2. The illusion of control.

The illusion of control will be taken into account because the preliminary interviews conducted with board member of company pension funds, indicated that various external advisors often surround the boards. It would be logical that they would have warned the Board when something went wrong.

3. Problem recognition.

Problem recognition is of importance because when a situation is not seen as a problem no activities to solve the problem will be started. To agree about the problem solving activities a decision is necessary.

2.3.1.1 Time Constraints

Time constraints can put enormous pressure on the decision-making process and the outcome (Rastegary and Landy, 1993). The pension fund planned to achieve a certain return based on how the strategic investment portfolio is composed. In planning decisions there are always time constraints. Flyvbjerg (2009) states, that planning decisions that are influenced by 'planning fallacy' (optimism) and 'strategic misrepresentation' (lying) always face an overshoot of time and money. As time pressure increases, our ability to examine and compare choice alternatives is challenged, and the decision-making process is modified. These changes include ignoring some choice alternatives altogether, information selectivity, change of threshold for responding and more. Time pressures can increase biasing effects (Kruglanski and Freund, 1983, Freund et al., 1985), perhaps because information selectivity is higher and decision criteria thresholds are lower (Dror et al., 1999). The study by Papadakis and Lioukas (1996) claimed that crisis situations seem to affect the decision-making process differently than pressure situations. Decisions posing pressure seem to be subjected to the formal rules. In this context it is important to establish whether the formal rules have an emergency procedure, which comes in place as soon as the situation is regarded as a time pressure situation.

2.3.1.2 Illusion of Control

The illusion of control is the tendency for people to overestimate their ability to control events. The effect was named by Langer (1975). The effect has been replicated in many different contexts (Plous, 1993). The illusion of control is more common in familiar situations, and in situations where the decision-maker knows the desired outcome (Thompson, 1999). The illusion is strengthened by stressful and competitive situations, including financial trading (Fenton-O'Creevy et al., 2003). The illusion of control was demonstrated in three different ways - laboratory experiments, observed behaviour in familiar games of chance such as lotteries and self-reports of real world behaviour.

2.3.1.3 Problem Recognition

Problem recognition as such is not a bias. However, it is known that problem identification, which is an early stage of the decision-making process, is mainly influenced by people's cognitive capabilities (Yu and Luo, 2008). Bazerman (1983) demonstrated that the concept of framing problems affects individual behaviour. This was based on research carried out by Kahneman and Tversky (1979). Bazerman (1983) wrote that they demonstrated that individual decisions are systematically affected by the manner in which problems were presented. Specifically, individuals tend to avoid risks when problems are framed in a positive direction (e.g. concerning gains) and to seek risks when problems are framed in a negative direction (e.g. concerning losses). In the literature (Staw, 1976, Teger, 1980, Staw, 1981, Bazerman et al., 1982, Brockner and Rubin, 1984) it is demonstrated that decision-makers who commit themselves to a particular course of action may use additional resources in a non-optimal way in order to justify the previous commitment. In his article Bowen (1987)³ disagrees with that. He concluded that research on the escalation phenomenon to date

³ "previous studies and theoretical work suggest that the "escalation phenomenon" represents a syndrome of decision errors which tend to lock decision-makers into a course of action."
BOWEN, M. G. (1987) The Escalation Phenomenon Reconsidered: Decision Dilemmas or Decision Errors? *The Academy of Management Review*, 12, 52-66.

has arguably failed to demonstrate the phenomenon.

Problem recognition is sometimes referred to as problem setting or problem framing (Dietz, 2005). Efforts to study this phenomenon have looked at organizational interpretation (Weick, 2001). Weick (1995)⁴ captures the challenge with regard to these efforts very well. The more individuals involved, the more complex and difficult it is to determine what the problem(s) are and the context in which they play out (Dooley, 2002), especially when company pension funds are surrounded by many stakeholders who are involved in the decision-making process (see Appendix A).

2.3.2 Politics

The conflict of interest and the distributed power among different stakeholders makes the issue of politics an element in the decision-making process within Dutch company pension funds. Board members are appointed as delegates to protect their parents' interest. The Dutch supervisor recorded in his final report research theme Good pension fund governance 2011 (De Nederlandsche Bank, 2012d) that there are a number of stakeholders with different interests. In article 105 of the Pension Act, a balanced interest trade-off is prescribed. The implementation, (how to do it) is left to the pension funds. This brings in politics. Although the subject of politics is important the research is focused on the process and not on the influencing elements solely. However, politics as element in decision-making can be a topic for further future research. This research is not the place to elaborate on the issue of politics. Still it is important to understand politics as element in the decision-making process. Strauss (1962) deals in a study of lateral organizational relationships, with what he calls 'office politics'. He defines politics as the exploitation of resources, both physical and human, for the achievement of more control over other, and thus safer, or more comfortable, or more satisfying terms of individual existence. In short, the use of power for the achievement of more control is called politics. In Figure 2-2 politics in decision-making is shown.

⁴ "Problem setting is a process in which, interactively, we name the things to which we will attend and frame the context in which we will attend to them." WEICK, K. (1995) *Sensemaking in organizations*, Beverly Hills CA, Sage Publishing, Inc.

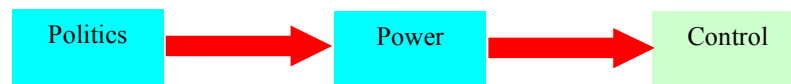


Figure 2-2: Politics in decision-making (Source: Strauss, 1962).

Many authors have argued that the source of politics is conflict (March, 1962, Baldrige, 1971, Pfeffer, 1981). When there is no conflict, there is no need for people to use politics to influence decision-making. Many authors have also argued that politics arise when power is decentralized (Hage, 1980, Pfeffer, 1981, Dean et al., 1987). When the power of individuals is roughly equivalent, they band together to influence decision-making processes. Conversely, when power is highly centralized, conflict is submerged and the use of politics declines (Pfeffer, 1981). This is shown in Figure 2-3.



Figure 2-3: Politics in decision-making (Source: March, 1962; Baldrige, 1971; Pfeffer, 1981).

However, a study carried out by Eisenhardt and Bourgeois ((1988) showed something else. Although conflict was important, power imbalance was crucial. Specifically, the use of politics was closely linked to centralized, not decentralized, decision-making. In their article (Eisenhardt and Bourgeois III, 1988) they made a statement⁵ about the relation between power, politics and control. In graphics this is shown in Figure 2-4.



Figure 2-4: Politics in decision-making (Source: Eisenhardt and Bourgeois 1988).

⁵ "The more powerful a CEO, the greater the tendency among remaining executives to consolidate power and engage in alliance and insurgency behaviours, while the CEO engaged in tactics for controlling and withholding information." EISENHARDT, K. M. & BOURGEOIS III, L. J. (1988) Politics of Strategic Decision Making in High-Velocity Environments: Toward a Midrange Theory. *The Academy of Management Journal*, 31, 737-770.

In the aforementioned study (Eisenhardt and Bourgeois III, 1988) political behaviour within top management teams was found to relate to poor firm performance. Papadakis and Lioukas (1996) claimed that decisions with a larger impact tend to be taken in a more rational mode (Stein, 1981, Dean et al., 1987). Again, decisions with widespread impact are expected to follow more formalized processes and attract more collective attention, as multiple parties would like to contribute (Dutton, 1986). Pension fund decisions about coverage ratio can have a widespread impact and the decision-making process is therefore expected to follow a more formalized process. Decisions of this nature may also cause a variety of views about the proper ways in which issues should be resolved. This usually leads to more political activities.

2.3.3 The Pension ‘Universe’

The financial importance of pension funds can be expressed as a percentage of the Gross Domestic Product (GDP). The Organisation for Economic Co-operation and Development (OECD) weighted average asset-to-GDP ratio for pension funds increased from 67.3% of GDP in 2001 to 72.4% of GDP in 2011, with the Netherlands achieving the largest ratio in 2011, at 138% (OECD, 2012). Due to the fact that the financial crisis had a worldwide impact, it is investigated whether there are countries with the same pension system, regulation and supervision. In case of similarity it is perhaps feasible to make use of the lessons learnt. To investigate whether there are similarities, information of the OECD and the European Union are explored. An overview (OECD, 2011) shows that the pension ‘universe’ in the 34 OECD countries and the eight major economies, which are members of the G20, differ. As the OECD (2011)⁶ comments that due to diversity classifying pension systems is difficult. For an overview of pension-systems see Appendix B. The International Organisation of Pension Supervisors (IOPS) founded in July 2004 by the OECD and the International Network of Pension Regulators and Supervisors (INPRS)

⁶ “Retirement-income systems are diverse and often involve a number of different programmes. Classifying pension systems and different retirement-income schemes is consequentially difficult.” OECD (2011) Pension at a Glance 2011: Retirement-income Systems in OECD and G20 Countries. IN PUBLISHING, O. (Ed.).

is an independent international body. It represents those involved in the supervision of pension funds, representing pension supervisors from over 60 countries - from Australia to Zambia - covering all levels of economic development and bringing together all types of pension and supervisory systems. It was felt that, concerning supervision, a more formal, independent, body could better serve as a world-wide forum for policy dialogue and the exchange of information, as well as a standard-setting body, promoting good practices in pension supervision. However, to date, little progress has been made and no results in the areas of information exchange, standardization, or promoting good practices in pension supervision have been made. The IOPS assigned Netspar (Broeders et al., 2012) to come up with a report regarding the design of European supervision of pension funds. However, this report has not yet reached the stage of political discussion. To conclude, there is currently no similarity in systems, schemes, funding, regulation, and supervision found on a worldwide basis. Any comparison of systems is likely to be controversial, as each system has evolved from that country's particular economic, social, cultural, political, and historical circumstances. Taking this into account it is stated that there is no perfect system that can be applied universally (Australian Centre for Financial Studies, 2012).

In the European Union there are four freedoms laid down in the Delors' white paper (Commission of the European Communities, 1985) concerning the creation of the Internal Market - free movement of goods, services, people, and money. To conduct a level playing field there are several institutions in which the pension sector is involved. Those institutions are responsible for setting up legislation or concept directives. One of those institutions is the Insurance and Occupational Pensions Authority (EIOPA). For the pension sector the IOPRP (Institutions for Occupational Retirement) directive is in place. In 2010 the Commission created a green paper (European Commission, 2010) on pensions called: Toward adequate, sustainable and safe European pension systems in which is noted:

'In his political guidelines for this Commission, President José Manuel Barroso highlighted the importance of adequate and sustainable pensions for strengthening social cohesion⁷. Member States are responsible for pension provision: this Green Paper does not question Member States' prerogatives in pension or the role of social partners and it does not suggest that there is one 'ideal' one-size-fits-all pension system design. The principles of solidarity between generations and national solidarity are key in this regard. In the Call for Advice in April 2011 the Commission expressed the intention to introduce a harmonized, risk-based prudential regime for IORPs. The new framework should ensure regulatory consistency and enhance protection of members and beneficiaries. In spring 2012 the European Commission received advice from EIOPA regarding the new IORP directive (EIOPA, 2012). In short EIOPA proposes a 'holistic balance sheet' as a means of developing a Europe-wide supervisory regime for IORPs. It also suggests enhanced qualitative requirements for governance and risk management of IORPs and finally EIOPA proposes strengthened and consistent information requirements for defined contribution schemes. In short, in 2012 there is neither harmonized legislation nor harmonized supervision on pension funds in the European Union. Together with the information of the OECD (2011) it can be concluded due to all the differences, the similarities between the pension 'industry' participants can be found on a national level. The only similarity, which exists on a broader scale on regulation and supervision, is the 'Pavlov response' of regulators and supervisors in terms of more is better. Haldane (2012) came up with the following data (see Table 2-2, Table 2-3 and Figure 2-6) which shows the increase in full time equivalents versus a decline in number of pension funds.

⁷ "Millions of Europeans are wholly dependent on pensions. The crisis has shown the importance of the European approach to pension systems. It has demonstrated the interdependence of the various pension pillars within each Member State and the importance of common EU approaches on solvency and social adequacy. It has also underlined that pension funds are an important part of the financial system. We need to ensure that pensions do the job intended of providing the maximum support to current and future pensioners, including for vulnerable groups." EUROPEAN COMMISSION (2010) GREEN PAPER: towards adequate, sustainable and safe European pension systems. *Green paper*. Brussels, European Commission.

Regulation	Genesis	Scope
Basel I	1988	30 pages
Basel II	2004	347 pages
Basel III	2010	616 pages
Glass-Steagal Act (US)	1933	37 pages
Dodd-Frank Act (US)	2010	848 pages
Pensioen- en Spaarfondsenwet (previous pension act)	1952	39 articles
Definitions in article 1	1952	14 definitions
Pension Act	2007	223 articles
Definitions in article 1	2007	64 definitions

Table 2-2: Pavlov response regulation in financial sector source: (Haldane, 2012).

Country	Year	Report content
UK	1974	Report with 150 entries
UK	2012	Report with more than 7.500 different cells with data
US	1978	547 columns in Excel
US	1999	1.208 columns in Excel
US	2011	2.271 columns in Excel
NL	2012	Unknown

Table 2-3: Pavlov response reports by banks source: (Haldane, 2012).

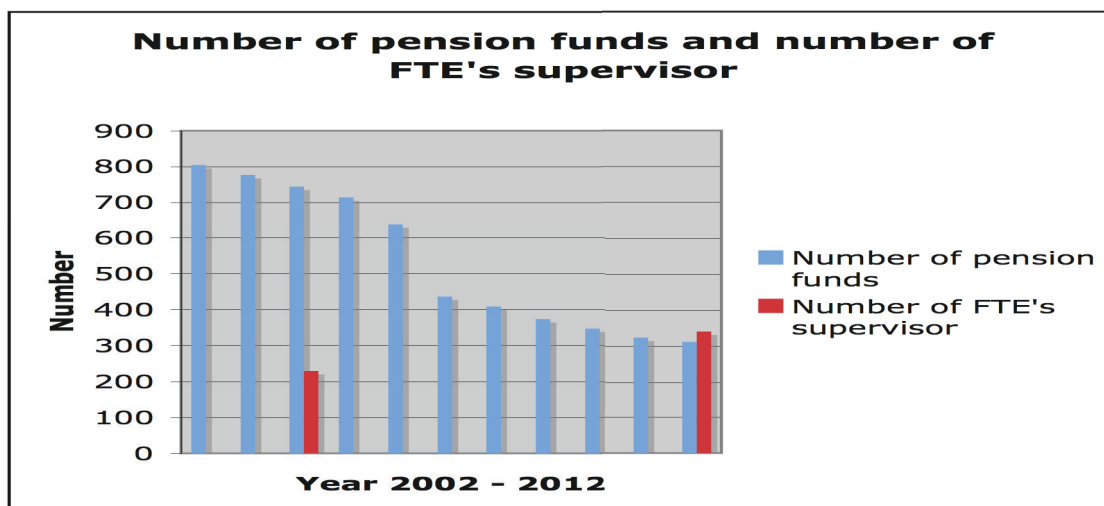


Figure 2-5: Number of pension funds and number of full time equivalents of supervisor in the Netherlands.(source: DNB http://www.dnb.nl/binaries/DNB-brede%20begroting%202012_tcm46-268183.pdf; accessed 22-05-2012).

2.3.4 Legislation

Legislation plays an important role for pension funds. It regulates: basic principles, categories of pension funds, demarcation of pension fund activities, financial requirements, board, supervision, and pension fund governance.

2.3.4.1 Basic Principles

On January 1, 2007 the Pension Act (Minister van Sociale Zaken en Werkgelegenheid, 2006c) was legalized and replaced the Pensions and Savings Funds Act. The new Act was primarily a modernization and technical revision of the previous Act. The division of responsibilities between the three-cornered relationship of employee, employer and pension provider is clarified. Moreover, the supervisory framework is revised. These and other changes are intended to make the Dutch pensions system shock- and future-proof. Social developments such as increasing workforce mobility, the transition from the single-breadwinner model to the two-income model, and increasingly demanding citizens have all had consequences for pensions' legislation and supervision. The new Pension Act does not change the basic principles of the pension system, the pension regulation, and pension supervision. The principles remain the same as those underlying the Pensions and Savings Funds Act. The starting point is that pension provisions form part of the compensation & benefits package of employees. Employers and employees, represented by social partners, retain primary responsibility for the establishment of these pension provisions. If an employer and an employee have entered into a pension agreement, the Pension Act contains terms and conditions that the pension provisions and agreement must comply with. One of these is that the pension agreement must be administered by a pension fund or an insurer in The Netherlands or in another EU-Memberstate (Article 23 Pension Act). The Pension Act also sets out the operating requirements for the pension fund or the insurer. The Dutch Central Bank (De Nederlandsche Bank hereafter called: DNB) and the Netherlands Authority for the Financial Markets (Autoriteit Financiële Markten, hereafter called: AFM) supervise compliance with

the regulations of the Pension Act. More emphasis and transparency is a theme which runs throughout the Pension Act:

1. A clear division of responsibilities between employer, employee, and pension provider.
2. Transparency provided by the pension provider to pension scheme members (information).
3. More and better insight into the financial solidity of pension funds through the Financial Assessment framework (FTK), (Minister van Sociale Zaken en Werkgelegenheid, 2006a)).
4. A clear division of responsibilities within pension funds (Pension Fund Governance).

2.3.4.2 Categories of Pension Funds

In the Netherlands pension funds are divided into three major categories: industry-wide pension funds (whether or not compulsory), company pension funds and occupational pension funds. Various obligations have been laid down for pension funds in the Netherlands Civil Code (Minister van Justitie, 1992), the Industry pension fund Act (Staatssecretaris van Sociale Zaken en Werkgelegenheid, 2000), the Obligatory Occupational Pension Schemes Act (Minister van Sociale Zaken en Werkgelegenheid, 2005), and the Pension Act (Minister van Sociale Zaken en Werkgelegenheid, 2006c). To safeguard the pension, an employer must arrange for the obligations under a pension agreement to be organized outside the confines of his business. This can be done in a company pension fund connected to the employer or by means of an administration agreement with an insurer. If the employer comes within the scope of a compulsory industry-wide pension fund, he must arrange for the pension agreement to be administered by the industry-wide pension fund under certain administrative rules. A pension fund must be a recognized as a legal entity, usually a foundation. Under the law of legal entities contained in the Civil Code, pension funds are subject to a number of obligations. In addition, the Pension Act is applicable to the company and industry-wide pension funds as the Industry Pension Fund Act is applicable to the compulsory industry-wide

pension funds. The Obligatory Occupational Pension Schemes Act is relevant for occupational pension funds.

2.3.4.3 Demarcation of Pension Fund Activities

The board has to define the pension fund activities. This means that the fund may operate voluntary schemes in addition to the compulsory basic scheme, provided that the board observes rules of solidarity. In the case of occupational pension funds the law requires a flat-rate contribution, except in the case of contribution schemes or voluntary schemes. To guarantee solidarity, the conditions for the voluntary schemes should - as far as is possible - be the same as for company pension funds and industry-wide pension funds. Compulsory industry-wide pension funds generally have a duty to charge a flat-rate contribution, are not permitted to advertise on behalf of associated institutions, and are subject to restrictions on the provision of financial information. A pension fund may only concern itself with pension obligations. In other words, it may not engage in secondary activities.

2.3.4.4 Financial Requirements

The Financial Assessment Framework (FTK) lays down the statutory financial requirements for pension funds. The basic principle of the FTK is the market valuation of both liabilities and assets. A pension fund must maintain a solvency buffer, referred to in the Pension Act as regulatory own funds. The minimum regulatory own funds are the lower limit of the regulatory own funds. If the own funds fall below this lower limit, a pension fund has a funding shortfall. The technical provision is determined by discounting expected future cash flows against the current nominal term structure of interest rates. The calculation of regulatory own funds is risk-based, so that the requirements increase and decrease in line with the fund's exposure to risk.

2.3.4.4.1 Coverage Ratio

As mentioned in section 1-1 the coverage ratio is defined as the current market value of total assets divided by discounted pension liabilities (Minister van Sociale Zaken en Werkgelegenheid, 2006c). Figure 1-1 shows the decline of the three different levels of coverage ratios. In Q4 2010, 14 Dutch pension funds were forced to reduce the pension entitlements as of April 1, 2011. In the following Table 2-4 one can see the status of the implemented pension entitlement reduction measure per April 1, 2012 and as proposed per April 1, 2013 (De Nederlandsche Bank, 2012b).

Subject	2012 realized	2013 proposed
Number of funds	5	103
Weighted average discount	6.8%	2.2%
Total pension obligations	1.8 billion euro	390 billion euro
Total (former) participants	28,000	7,500,000
Participants	9,000	2,400,000
Former participants	16,000	3,900,000
Beneficiaries	3,000	1,200,000

Table 2-4: Discount measures (source: DNB <http://www.dnb.nl/nieuws/nieuwsoverzicht-en-archief/nieuws-2012/dnb273014.jsp>; accessed 22-05-2012).

As of April 2013 the number of pension funds reducing the pension entitlements and entitlements will increase to a total of 122 and even the pension fund of the AFM (one of the two Dutch supervisors) is amongst them according to a newspaper article (Wijk, 2012). Without additional money from the employer a discount of the pension entitlements of 9% is needed to achieve a 105% coverage ratio for that specific pension fund. The solvency buffers are assets additional to those required to cover technical provisions, which pension funds may hold. The amount is related to the risk profile of the pension fund. They need to perform a solvency test of which the result is the percentage of the required additional assets. More precisely the solvency test determines whether sufficient solvency is present to cope with unforeseen events during the next twelve months. The test requires that a 97.5% probability should exist that the value of the assets will at least equal that of the liabilities. If the coverage ratio

is between 105 and 130% a pension fund needs to come up with a recovery plan in which it shows that a coverage ratio of 130% is feasible within fifteen years (see 2.3.4.4.5). With a coverage ratio of more than 130% neither legislation nor the supervisory board (DNB) requires additional proof of the financial situation, because the fund seems to have a solid financial basis. If the coverage ratio is below 105% a legally defined action is required (see 2.3.4.4.4). The fund needs to make a so-called 'herstelplan' or Recovery Plan. Such a plan can lead to turmoil amongst pension members since it often needs to include measures, which are disadvantageous for the members (i.e. reducing pensions, increasing the contribution of the participants, and delaying promised indexation to the pension value retention). In short, very unpleasant measures for the participants of a pension fund.

2.3.4.4.2 Investments, Obligations and their Valuation

Both investments and obligations are based on market value. Market prices of investments are in general immediately available. In determining the technical provision, expected future cash flows, calculated realistically, are discounted against the current nominal term structure of interest rates. The obligations must be fully covered by investments at all times, taking into account regulatory own funds and minimum regulatory own funds.

2.3.4.4.3 Regulatory Own Funds

A pension fund must have sufficient own funds to ensure with a confidence level of 97.5%, that the value of the fund's investments will not be less than the level of the technical provisions within a period of one year. This regulatory own funds requirement increases in line with the fund's exposure to risk.

2.3.4.4.4 Minimum Regulatory Own Funds

The minimum regulatory own funds are 105%. The requirement is the lower

limit of the regulatory own funds requirement, and is derived from the implementation of the European Pensions Directive. A fund whose own funds have fallen below the minimum regulatory own funds has a funding shortfall. It must draw up a short-term recovery plan within two months, outlining how it will eliminate the funding shortfall within three years. It must appear from the plan that:

1. The likelihood of recovery will improve.
2. The risks for entitlement beneficiaries and pension beneficiaries do not increase.
3. The likelihood of granting additional rights is not adversely affected.
4. If these conditions are not complied with, a recovery period of one year applies.

2.3.4.4.5 Reserve Deficit

A pension fund whose own funds are lower than the regulatory own funds but are still above the minimum regulatory own funds (105%) has a reserve deficit. It must draw up a long-term recovery plan within three months, outlining how it will eliminate the reserve deficit within fifteen years via a steady recovery.

2.3.4.4.6 Reductions in Pension Entitlements and Rights

A pension fund may only reduce pension entitlements and rights if:

1. The technical provisions and the minimum regulatory own funds are not covered by the investments, and
2. The pension fund is not in a position to recover this situation without disproportionately harming the interests of members, deferred beneficiaries, pension beneficiaries, other entitlement beneficiaries, or the employer, and
3. All other available means of influence, except investment policy, have been applied in order to comply with the minimum regulatory own funds within three years.

2.3.4.5 Board

The board of the pension fund administers and is responsible for the scheme. The principles of the board's policy are described in the Actuarial and Operating Memorandum (AOM). In a company pension fund the representatives of the employees must have at least as many seats as the representatives of the employer.

2.3.4.6 Supervision

The pension institutions are under the directive of two separate supervisors. The Pension Act distinguishes between prudential supervision and conduct of business supervision. In addition, the Pensions Act uses the term 'material supervision'. This activity is neither prudential supervision nor conduct of business supervision. DNB is responsible for prudential and material supervision. AFM is responsible for conduct of business supervision. The supervision carried out by AFM primarily relates to communications from the pension provider to employees who are acquiring or have acquired pension rights. The Pension Act introduces a more risk-based supervision. It focuses on consistency between the contents (the pension promise), the funding and the ultimate realization of pension provisions. The matters on which each supervisor exercises supervision are strictly designated by an Order in Council. This is set out in the Decree on the Implementation of the Pension Act and the Obligatory Occupational Pension Schemes Act (Minister van Sociale Zaken en Werkgelegenheid, 2006b). The aim is a strict separation of supervision without overlaps or blind spots. Rules have therefore been made concerning the cooperation and sharing of information between both supervisors, DNB and AFM. The prudential supervision carried out by DNB focuses primarily on the funding of pension provisions. Prudential supervision aims at contributing to the financial solidity of pension funds and the financial stability of the pension funds sector. The material supervision relates primarily to the content of the administration agreement between the employer and the pension provider, and to the content of the pension agreement describing the relationship between the

pension provider and the employee.

2.3.4.7 Pension Fund Governance

There is a body of literature covering pension fund governance (Drucker, 1976, O'Barr and Conley, 1992, Ambachtsheer et al., 1996, 1998b, Capelle, 2004, Capelle, 2005). Amongst many other issues, they (Ambachtsheer et al., 1998b) found that there is a link between governance and pension fund performance. In the Netherlands pension fund governance has its roots in the Pension Act (Minister van Sociale Zaken en Werkgelegenheid, 2006c) that places extra emphasis on transparency. These principles of pension fund governance, which are laid down in the Pension Act, were drawn up in 2005 by the Labour Foundation (Stichting van de Arbeid, 2005). The Principles are aimed at the quality, accuracy, and openness of pension providers - insurance companies and pension funds - in The Netherlands. The 'Principles for good pension fund governance' consist of the following elements: careful management, accountability, internal supervision, expertise, openness and communication. The management board has final responsibility for all activities of the pension fund. An institution must organize itself in such a way as to guarantee controlled and sound operations. Control has a legislative basis in article 33 (guarantee of sound management) and 143 (control and integrity of business operations) of the Pension Act. Further rules regarding the control and integrity of business operations are provided for in articles 18 to 22 of the Pension Fund Decree. These rules relate to the control of the business processes and business risks, the integrity and soundness of the pension fund. The control of business process and business risks also covers outsourcing (article 34 of the Pension Act). Further rules regarding outsourcing are provided for in articles 12-14 of the Decree on the Implementation of the Pension Act. The pension fund will often seek assistance from specialized advisors such as actuaries, auditors, investors, pension lawyers, tax specialists and communication experts. If the management board has established advisory committees to prepare decisions of the board, either with or without the help of external experts, the composition of these committees must be stated. The management board should check the

adequate implementation of the business processes, even if they are outsourced. Therefore the basic goal of pension fund governance regulation is to minimize the potential agency problems, or conflicts of interest, that can arise between fund members and those responsible for the funds management, so that these do not adversely affect the security of pension savings and promises (Stewart and Yermo, 2008). Good governance goes beyond this basic goal and aims at delivering high pension fund performance whilst keeping costs low for all stakeholders. Good governance can have many positive side effects such as creating trust amongst all stakeholders, reducing the need for prescriptive regulation, and facilitating supervision. Good pension fund governance can also be conducive to more effective corporate governance of the companies that they invest in, as well-managed pension funds are more likely to seek value for their investments via a more active shareholder policy. Good governance also needs to be 'risk-based'. For example, the more sophisticated the investment strategy the pension fund adopts, the stricter the governance oversight required; or the more complex the administrative arrangements of the plan, the tighter operational oversight needs to be. In the event of outsourcing, is risk management given additional attention? Is the board aware of the risks involved in outsourcing? Does the board take specific action to identify and manage the risks involved in outsourcing? Is the board in control (capable of exercising its responsibilities) regarding risk management of outsourced activities? In Dutch legislation, risk management has been embedded especially in articles 33 and 143 of the Pension Act. Further rules regarding the control and integrity of business operations are provided for in articles 18 to 22 of the Pension Fund Decree (FTK). However Pension fund governance has received, before and even after the compulsory implementation in the Netherlands based on legal regulation in 2007, worldwide attention (Capelle et al., 2008, Ambachtsheer et al., 1998b, Bikker and de Dreu, 2006, Ambachtsheer et al., 2006, Clark and Urwin, 2008, Ambachtsheer et al., 2007, Stewart and Yermo, 2008). A CEO Survey in 1997 (Ambachtsheer et al., 1998b) into the quality of pension fund governance uncovered a wide-spread competency problem. Ambachtsheer repeated the 1997 CEO Survey in 2005. This follow-up study analyzed the findings of the new survey (Ambachtsheer et al., 2007) and found a positive correlation between governance quality and fund performance. Ambachtsheer

et al. (2007) identified the main governance weaknesses as poor selection processes for members of the governing board, a lack of self-evaluation of board effectiveness, and weak oversight by the board. Other specific problems include lack of delegation clarity between board and management responsibilities, board micro-management, and non-competitive compensation policies in pension funds. At present the urgency of conducting good pension fund governance is well defined in the notes to the Law strengthening the governance of pension funds (Minister van Sociale Zaken en Werkgelegenheid, 2012c)⁸.

2.3.4.7.1 Being In Control

According to Ezra (2010) 'being in control' is governance. Did the decision-makers know what was going on, were they well-informed, did they establish the necessity of a decision and if a decision was taken did they act according to that decision? In short, was the decision-making process structured in such a way that the board was 'in control'? For this research 'being in control' means: are we doing what we agreed to do, are we doing what we are required to do by law and are we prudently taking care of the assets? By using this definition 'being in control' in this specific situation means the review of a body's activities and operations to ensure that these are being performed or are functioning in accordance with objectives, budgets, rules and standards. The aim of this review is to identify, at regular intervals, deviations that might require corrective action. Due to the fact that the risks for pension funds can vary depending on whether they are self-administered or insured, control activities should be focussed on questions to be answered. An overview of pension fund types is shown in the following Figure 2-6.

⁸ Translated by researcher: "to preserve confidence in the system of supplementary pensions, it is very important that participants and beneficiaries can be sure that the board of the fund is an expert, 'in control' and counterbalancing the interests in a balanced way." MINISTER VAN SOCIALE ZAKEN EN WERKGELEGENHEID (2012c) Wet versterking bestuur pensioenfondsen. s'-Gravenhage, Ministerie van Justitie.

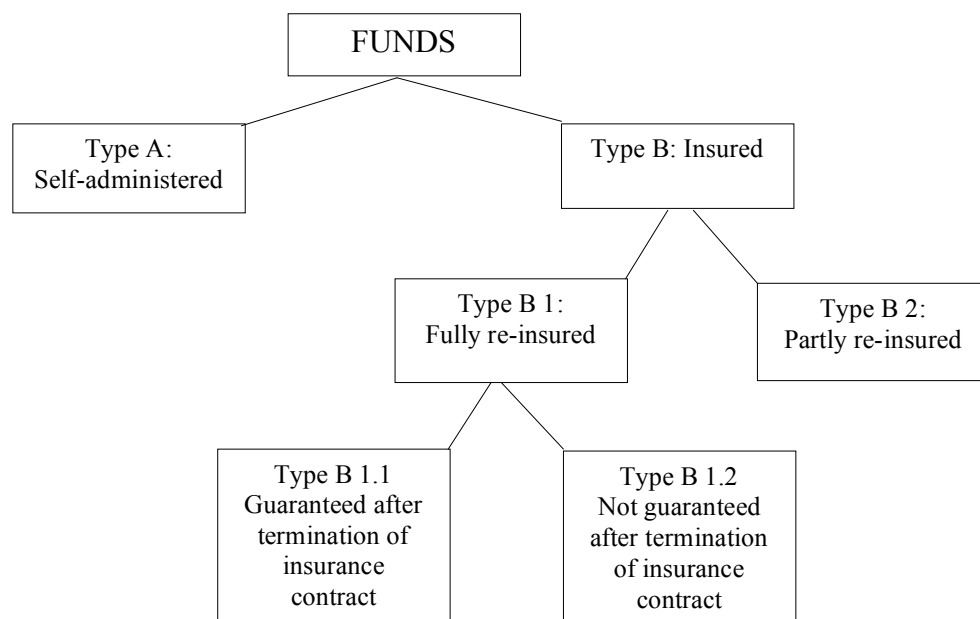


Figure 2-6: Types of pension funds based on risks

An overview of questions that should be raised for establishing the control activities per pension fund type is shown in Table 2-5.

Questions for control	Type A	Type B 1	Type B 2	Type B 1.1	Type 1.2
Are we doing what we agreed to do?	X	X	X	X	X
Are we doing what we are legally obliged to do?	X	X	X	X	X
Are we prudently taking care of the assets so that we can pay pension entitlements?	X	X	X		X
Are we prudently taking care of the assets so that we can pay indexation?	X	X	X	X	X

Table 2-5: Questions for being 'in control'.

In the above Figure 2-6, Type A funds (self-administered) can be in control when all board members know the agreement, if there is one, and information to calculate the coverage ratio is available. Type B 1 funds (re-insured) can be in control when all board members know the agreement, if there is one, and information to calculate the coverage ratio is available. Type B 2 funds (fully re-insured) can be in control when all board members know the agreement, if there is one, and information to calculate the coverage ratio is available. Type B 1.1 funds (fully re-insured with a guarantee) can leave the pension entitlements with the insurer after termination of the insurance contract. The agreement with the insurer can contain all kinds of obligations for the fund. In short, the fund should pay a price for the guarantee, which is provided by the insurer. The price for that guarantee is dependent on the risk that the insurer has with the warranty on that specific contract. The insurer often demands a part of the assets to be hedged. For the fund it turns out that the contract with the insurer implies two investment portfolios. One is the matching portfolio and the other is the return portfolio. The coverage ratio is perhaps not that important. It can become important when indexation promises have been given to the participants. Type B 1.2 funds (fully re-insured without a guarantee) are fully responsible for pension entitlements after termination of the contract. The insurer is only responsible for the payments of the pension entitlements during the contract. When – at the end of the insurance contract term - the fund has a funding deficit it should solve it because it is their responsibility. The board should therefore focus on all the raised questions for control and thus perform good pension fund governance. To summarize the aforementioned situations: The norm of 105% coverage ratio is the yardstick to which each fund must adhere, regardless of whether the fund is fully re-insured or not. Therefore the questions to establish whether the board is 'in control' should be the same regardless of whether the fund is re-insured or not.

2.3.4.7.2 Careful Management

The process of decision-making should be organized in such a way that good governance/stewardship is ensured. Good governance should not be modified

under different situations. Currently it seems as if there is much to improve. Luyendijk (2012) wrote, based on his experience as a journalist in the City, that pension funds board members were called ‘muppets’ by asset managers in the City. This was so, because they apparently never ask questions. This should be done because countervailing power is part of good governance. One study (Werkgroep Integriteit Pensioenfondsen, 2013) researched the quality of the governance of Dutch pension funds. They suggested a code of conduct for the management of pension funds in the Netherlands in which policy beliefs should be mentioned⁹. It indicates that there is a non-written assumption that the stewardship of board members would be beyond any doubt. Stewardship is an attitude, which is studied in mutual funds. Wellman and Zhou (2005) indicate that board quality is the most important factor to explain mutual funds’ performance among all possible fund governance factors. Khorana (1996) has shown that in the mutual fund industry, effective fund governance can be facilitated by “internal” (board) or “external sources”. Khorana, et al. (2007) demonstrate that boards containing more independent directors show little tolerance to poor performance. They continue to document that the effect is even stronger when all directors are independent. Wellman and Zhou (2005) argue that fund governance plays a role in mutual fund performance. Ding and Wermers (2005) use the number of independent directors to proxy fund performance and show that better board quality increases the probability to replace managers who under-perform their peers and predict better future performance. Qian (2006) document that well-governed mutual funds not only have better performance but also take investors’ rights into their investment or policy making consideration. Considering Dutch pension funds it has been written (Sleijpen et al., 2012) that it is not the coverage ratio that threatened Dutch pension funds but its governance.

⁹ Translated by researcher: “they don’t go about their own money. They are about the money of the participants.” WERKGROEP INTEGRITEIT PENSIOENFONDSEN (2013) Besturen kijken in de spiegel. Transparency Nederland.

2.4 Summary

Summary Table for Chapter Two

1. Discussion of the theoretical underpinning with view on different decision-making theories and the choice for the process approach.
2. A discussion of biases and other background information such as the pension 'universe' and legislation.
3. The goal of pension fund governance is explained, together with an overview of possible shortcomings such as not 'being in control and not careful management.

3. Conceptual Decision-Making Process Model

3.1 *Introduction*

To reach the objective of this research project, it is necessary to develop a conceptual decision-making process model which is tailored to analyze the decision-making processes regarding the coverage ratio. It is not supposed to be a prescriptive model. It should be an analyzing aid. By using this model for the analysis of the decision-making process of all participating organizations it is possible to compare the results. The value of this model lies in the fact that there is currently, no standard decision-making process for pension funds. Pension funds are free to develop their own processes within the confines of legal rules and regulation. An important issue in developing a conceptual decision-making process model with minimum conditions for appropriate establishment of the coverage ratio is the selection of the constructs used to represent the decision-making process. Two criteria are used to in making the choice. First, the constructs must be central to the decision-making literature. Second, the constructs must be logically and empirically distinct.

3.2 *Theoretical Foundation of Conceptual Research Model*

The conceptual research model originates from and addresses both theory and practice - it complies with the law whilst making use of the organization's experience established in procedures. The procedures regarding decision-making process are invariably recorded in the Actuarial and Operating Memorandum (AOM). In other words the law, the AOM and other factional documents, which describe or prescribe the process or parts of it specifies the TO BE situation.

To arrive at a conceptual research model of the decision-making process of Dutch company pension funds it is important to discuss the theoretical building blocks underlying such a model. The logic for the process model is based on one theoretical foundation. According to McGrath's (1984) classic input-

process-output (IPO) model, organizational input (e.g. new information from asset-managers or others) influence organizational outputs (decisions) through specific team processes (decision-making).

Several authors (Lewin, 1951, Noorderhaven, 1995, Weick, 1995) provide starting points for the conceptual model and its different phases. For the process in itself, two important concepts require more discussion in terms of problem recognition. Those terms are complexity and context. Context is selective perception and illusion of control. The relationship between these two concepts leads to problem recognition. An organization's complexity is based on the number of employees, teams, clients, services provided, and other similar elements. Within the organization some person or persons will identify an event that can have an effect on the organization. This person will then attempt to define the event, usually through some type of interaction with others in the organization. Every new person involved in discussion of the event brings with him or her a unique perspective. The convergence of these perspectives becomes the defining context for the problem. This process can also be called information seeking. Information seeking is generally an individual activity and is undertaken to identify and select information to satisfy a previously detected need for information on a certain topic. Information seeking is seldom an end in itself but is a part of a broader decision-making process. Information seeking within organizations is a condition of the information flow within the organization, integration of information with internally generated information, and internal conditions that may influence access to and use of information. The content of each of these conditions is dependent on the openness of an organization. The more open an organization, the more responsive the individuals and groups (teams) are to each other –internally as well as externally. When unity and responsiveness are low, information will tend to become compartmentalized and individuals will not share it readily. This argument leads us back to the first step in Lewin's (1951) problem-solving model. His model consists of the following three steps.

1. The first step should be taken after a gap is acknowledged. A gap is the difference between the optimal defined situation (TO BE) and the actual situation (AS IS). After the discovery of such a gap the organization should draw up a strategy to close the gap between the real and the ideal.

2. The second step is the solution or in other words the production of a result.
3. The third and last step is to evaluate the effectiveness of the strategy. If a weakness to problem solving in organizations is related to how well problems are recognized, then the more open an organization, the better opportunity it has to more completely frame or understand the problem regardless of the complexity of the problem and/or the organization.

Board level debate is a deliberate process in which board members discuss, challenge and contest one another's opinions, ideas and positions about the decision (Mitchel et al., 2009, Simons et al., 1999). Decision-making comprehensiveness describes the degree to which the board is exhaustive as it considers multiple approaches, courses of action, and decision criteria in its decision-making (Fredrickson, 1984, Simons et al., 1999).

Karl Weick (2001) suggests that understanding a problem before moving into a problem-solving process is an aspect of organizational learning. Weick's theory on organizational interpretation follows a particular path. The path moves through three stages – scanning, interpretation, and learning. Simply collecting data is the first step in Weick's process. The second step is the actual interpretation of the data, and Weick suggests there are two elements that govern this – equivocal reduction and assembly rules. Equivocal reduction is the extent to which the data is unclear or ambiguous. Many decisions are made with limited information about their potential consequences. Good decisions are driven by data. Statistical skills allow decision makers to intelligently collect, analyze and interpret data relevant to decision-making (Cooper and Schindler, 2006).

Assembly rules are procedures or guidelines that organizations use to process data into a collective interpretation. In other words, when information enters the organization it must have a value and a use. The more ambiguous the information, the more difficult it is for the organization to determine the value of this information, and the fewer procedures the organization will have for using the information. Likewise, the clearer or less ambiguous the information, the easier it is for the organization to determine the value of the information and use it appropriately. The discussion above suggests that before the problem-solving process starts, information of some type must reach the organization. This is

generally referred to as scanning. The information managers of the organization filter the information and detect suspected problems. The results of scanning and interpretation become a source of knowledge for the organization and may become a problem to be resolved or a step in defining a problem to be resolved. There is little formal research on problem recognition within organizations. There are some interesting ideas. First, much of this research (Weick, 2001) acknowledges the complex nature of problems. Second, the activity of recognizing problems is built around relationships and shared information, and the shared interpretation of this information. However, the generation, transfer and sharing of specialized knowledge in boards can be time consuming and difficult (Szulanski, 1996, 2000). In particular, knowledge sharing can be impeded by the tendency to guard and selectively share information (Hansen, 1999, Szulanski, 1996). Furthermore, because knowledge is localized embedded (Lave, 1988), knowledge boundaries arise among board members from different background and functions. Such boundaries hinder interfunctional knowledge sharing and problem solving because of syntax, semantics, and political problems (Carlile, 2002). It would also suggest that a linear process for solving problems might not be the most effective process. In other words, complex organizations will have complex problems, and those problems will require complex (maybe non-linear) processes for recognizing and solving those problems. This means that default settings like procedures and checklists could contribute to less complexity in information which enters the organization. Data would become less multi-interpretable. Checklists could contribute to this. Originally the checklists came from aviation. They were first developed and used for the B-17 bomber some 80 years ago. Nowadays pilots have a checklist for virtually all complex situations that may arise. Every separate checklist covers only one complex situation. An appropriate checklist is accurate. They are efficient, practical, and easily applicable in business and thus the most complex situations. The use was extended from aviation to hospitals. Figures show that the use of checklists in hospitals leads to significantly fewer deaths, complications, infections, and a repeat of surgical procedures (Gawande, 2007, 2010). A decision-making checklist for pension funds could also lead to improvement of the decision-making process of pension funds as well. An insight into the fixed items on the agenda of Board

meetings is required for drafting checklists. There may be a checklist prepared per subject. A checklist can be an established contribution to the quality of decision-making. This is needed to verify that nothing is forgotten.

3.2.1 Phases within the Conceptual Research Model

The conceptual research model being developed for and examined through this research is an attempt to capture some of the complexity found in organizations. Though the steps of the model have a linear appearance, the idea behind the model is that organizational layering is not bound to a step-by-step progression. This is in line with Weick's model of information processing. The steps of the conceptual research model (4A-model) are:

1. Availability of data (fact-finding and approved procedures). This is the equivalent of scanning.
2. Awareness (problem recognition). This is the equivalent of interpretation.
3. Analysis (weighing the alternatives) and
4. Action (to come to a decision). This is the equivalent of decision-making from Weick's (2001) model of organizational change.

The aforementioned steps find their origin in the literature (Lewin, 1951, Mintzberg et al., 1976, Simon, 1976, 1979, Chaiken, 1980, de Smit, 1982, Noorderhaven, 1995, Roy, 1996).

The awareness phase is critical to the entire process. This is a phase in which the context and the scanning are crucial for the problem recognition. Those elements are part of the conceptual process framework and will be elaborated on in the following sections.

In the intermediate stage between awareness and analysis there is the decision to escalate, because a meeting needs to be prepared. It is known that decision-makers often have to make decisions under escalated situations in which a loss has resulted from an earlier decision. During the research period the coverage ratio dropped. This was the result of previous asset management decisions. During the intermediate stage the decision-makers had to decide whether to quit or continue with the failing course of action. That choice presents a dilemma, which was also suggested by Staw (1997).

Research (Brockner, 1992, Staw, 1997) has shown that in this kind of situation, individuals who are personally responsible for the prior decisions have a stronger tendency to persist than do those who are not personally responsible for these decisions. A similar tendency has been observed in a variety of situations, including gambling (McGlothlin, 1956) and investment (Thaler, 1980).

3.2.2 Phases of the Model in Relation to Regulation

The necessity of the various phases is also reflected in legislation and factional documents as one can consider the conceptual research model is, as mentioned before, based on theory, law, the AOM and other factional documents, which describe or prescribe (parts of) the process. An overview of the prescribed elements in the research model is shown in Table 3-1. As one can see, for three out of four phases legislation is applicable. For all phases the obligation stems from factional documentation. So far it seems as if the model is prescriptive. However, legislation does not prescribe how the process should be executed. The legislation is primarily a requirement to be met. It prescribes what should be achieved or conducted. In the internal documentation, particular attention is given as to how the legal requirement should be met. The applicable articles of the Pension Act are not rigidly defined. Therefore it should be noticed that interpretation is essential for the translation of legislation into pension fund own documents. All these legal requirements have been formulated on the basis of principles. This means that the legislator does not prescribe exhaustively and specifically how an institution must achieve e.g. controlled conduct of business. It is up to the fund itself to indicate why it considers its business operations to be in control. So far, it seems as if there is much freedom for pension funds to establish their own way of conducting the business as long as they can assure that the promised pension entitlements can be paid. However, it is also a foundation for conflict between the fund and the supervisor. The supervisor conducts a principle and not rule based supervision. Therefore the interpretation by the fund or the supervisor can vary. The process is the translation of the requirements/principles set by law and the

interpretation of it by pension funds for conducting the business. In fact the process shows the actual implementation.

Origin	Subject	Availability	Awareness	Analysis	Action
Article 33 Pension Act	Controlled and sound operations (Pension fund governance)	X	X		
Article 34 Pension Act	Outsourcing	X			
Article 105 Pension Act	Balanced interests				X
Article 143 Pension Act	Control and integrity of business operations	X			X
Articles 18 Pension Fund Decree	Controlled business	X	X		X
Articles 18 and 22 Pension Fund Decree	Soundness of the fund	X	X		
AOM (pension fund)	Controlled and sound operations	X	X		
AOM (pension fund)	Financial assessment	X	X	X	
AOM (pension fund)	Risk management	X	X	X	X
Factional documents (pension fund)	Responsibilities of committees or officials		X	X	X
Factional documents (pension fund)	Process of preparation of meetings or decisions	X	X	X	X

Table 3-1: Overview of prescribed elements in the research model.

The overview shows:

1. The Availability phase has very much attention to law and factional documents in the acquisition of data to calculate a coverage ratio.
2. The Awareness phase has a lower binding basis. Although this part of the

process is governed by law and factional documents like AOM and other documents.

3. The Analysis phase is governed solely by internal documents.
4. Law and internal documents govern the Action phase.

Taken into account the information of Table 3-1 it can be concluded that there are two TO BE situations. The first is the one required by law and based on principles. The second is the translation of those principles by the pension fund. An analysis of the different phases can show whether the final decision is based upon the consideration of the underlying standards, which, whether or not legal, are applied, and risks are weighed. These are interests of the company and members, beneficiaries and former members of the pension fund. It is therefore crucial that the process is traceable and explainable. By doing so, decision-makers work on the issue of control and integrity of operations, and ensure good governance (Rademaker and Hinskens, 2011).

3.3 Practical Application and the Conceptual Research Model

In the previous sections the theoretical foundation is discussed. In the following sections of this chapter the theoretical foundation will be translated into a model, which will be used for analyzing the real life situation. Each stage will be enhanced with different variables and indicators.

3.3.1 Phase 1: Availability of Data

The start of the decision-making process on coverage ratio is the gathering of information about the coverage ratio. In phase one of the conceptual research model (see section 3.3) three variables are investigated. The information about the coverage ratio should cover the actual value of assets and liabilities per period. The pension funds are legally required to report every three months on the coverage ratio to the supervisor, which was the reason for using the same period of time in the questionnaire. It can be the case that, for various reasons, the actual information is not available. There are many reasons for this situation

including:

1. The asset manager provides the information about the assets. Difficulties, which can occur, can have an origin in the choice for complex products. Here also plays the often unknown or defective valuation of derivatives. Another cause may be whether the collateral and the clearing are implemented in the same timeframe, or this is done at other times. Often the asset manager is an external institution. The provision of information is a matter of contractual agreement. Often the information provision is not adjusted to the client's requirements. In that case it is business as usual for the asset manager, even when a crisis is coming up.
2. The information of the actual liabilities is provided by the administration. Often the market value of the liabilities is not known because there is e.g. a backlog in processing changes in the participants' database. It always requires calculation. Due to the fact that liabilities are not publicly traded, there is no objective market value. To overcome this problem DNB has introduced the Interest Rate Term Structure (known as RTS) as a management tool, which provides the figures, which should be used as interest rate.

The measurement points of the variable 'information about coverage ratio' are:

1. Value of assets and liabilities per July 1, 2008.
2. Value of assets and liabilities per October 1, 2008.
3. Value of assets and liabilities per January 1, 2009.
4. Value of assets and liabilities per April 1, 2009.

Practically not knowing, within a reasonably margin, the value of the assets or the liabilities means that the rest of the decision-making process is based on guesswork. This is in conflict with proper risk management. Managing the coverage ratio is a process, which should be part of the integral risk management process. This process starts with an Asset and Liabilities Management study. ALM is the process of obtaining an understanding of the interdependencies in the development of the assets and liabilities of the fund. The result of the ALM study is the input for the strategic asset allocation portfolio. This requires two forms of risk management. Those are: the risk management of the strategy and risk management of the execution. Thereby

the definition of the risk attitude, risk measure and risk sources, as well as the scope and interpretation of the risk budget are important. There are different definitions of the risk measure.

1. Volatility yardstick: for example the standard deviation of the coverage ratio rate of return or the tracking error of investments in relation to the liabilities. This measure shows the agility of the coverage ratio
2. Value at Risk: for example the 2.5% VaR of the equity (also called Surplus at Risk). This measure shows the measure of decline of the coverage ratio in the 2.5 percent worst scenario's.
3. Expected shortfall measure: for example the 2.5% 'expected shortfall (also called: 'conditional ' Value at Risk (CVaR)). This measure shows the average coverage ratio in the 2.5% worst scenario's.

Nothing is prescribed and therefore choices need to be made. Managing the coverage ratio is therefore depending on the design and use of parameters within the ALM study.

In order to be 'in control' the board needs to have correct, timely and relevant information available. The board should remain in constant contact with the asset manager and continuously monitor the investment policy in terms of risk, coverage ratio, liabilities, development regarding return, and strategic policy agreements. The board need to know whether the risks were in accordance with the policy and which returns are achieved? At discrepancies or if (economic) assumptions are no longer valid the policy or implementation should be adjusted. Managing on risks is an ongoing process of policy, implementation and monitoring. The use of VaR can be part of it. Risk restrictive measures could prevent the occurrence of a decrease on the coverage ratio. In terms of risk the interest rate is of major importance for pension funds, because it has consequences for the assets as well as for the liabilities. Any fluctuation of the interest rate has an impact on the balance sheet of a pension fund. Pension funds must quantify their liabilities according to the new accounting regulation of market-based valuation of liabilities. Before that, the use of a fixed interest rate for discounting the future expected benefit payment was common. For years,

the interest rate was fixed at 4%. To avoid the negative financial consequences of interest rate fluctuations, the fund could consider excluding the risk. This can be put into operation by interest rate immunization, to start by fully matching the entire portfolio. Several methods, including cash flow matching, duration matching, and volatility and convexity matching can accomplish interest rate immunization.

When a pension fund makes use of external service providers, the same rules apply (article 34 Pension Act). This means that the board should be 'in control' and it needs to have correct, timely and relevant information available. Once again, it is a legal requirement to take care of these responsibilities in a prudent manner. Whether a pension fund makes use of external service providers depends for example on costs, own knowledge, and size of workforce. Dutch pension funds can choose from several options:

1. Hiring many different external experts (in sourcing knowledge and capacity).
The board is in contact with each external expert.
2. Hiring fiduciary management. This in turn leases the asset manager on behalf of the pension fund and they keep track on the results which can be benchmark information and asset classes (Molenkamp, 2008).
3. The pension fund does everything in-house. The costs of this option can be high and requires in-house knowledge of every activity.
4. The pension fund hires an external government body or agency. A government body or agency can overcome a possible overload of information and activities for the board (Dautzenberg and de Jong, 2010).

Due to the fact that the board remains responsible, even if they outsource or insource knowledge or capacity, the question is: how do they know that whatever is done is in line with the mission, vision, strategy and ambition. To know if the provided service matches the expectations an information provision should be arranged in the contract with the external service provider together with the terms and conditions. Internally the responsibility for monitoring or compliance should be addressed and executed.

Another variable is pension fund governance. In the Decree on the Implementation of the Pension Act (Minister van Sociale Zaken en Werkgelegenheid, 2006b) there are legal requirements for pension funds to implement the pension fund governance principles and rules. The 'Principles for good pension fund governance' consist of: careful management, accountability, internal supervision, expertise, openness and communication. Based on the Decree on the Implementation of the Pension Act, the following committees should have been installed: Supervisory board or Accountability body, Review Committee, Complaints body, and Members council. The dataset is completed by information about how the continuity and expertise of the board is ensured.

The final variable to be configured in this phase is the default settings. Knowledge about the default settings is necessary, because it is feasible that agreed procedures and checklists are part of the decision-making process. Therefore, questions will be raised about the availability of a compliance officer and responsibilities. In the following Table 3-2 an overview is shown of the variables and indicators of phase one.

Number	Process phase	Variable	Indicator
1	Availability of data	Information about coverage ratio	Value of assets and liabilities per July 1, 2008 Value of assets and liabilities per October 1, 2008 Value of assets and liabilities per January 1, 2009 Value of assets and liabilities per April 1, 2009
		Pension fund governance	Implementation of required bodies
		Default settings	Decision-making procedures Use of checklists

Table 3-2: Overview of variables and indicator in phase 1.

3.3.2 Phase 2: Awareness

Based upon the previous phase, a clear view on the actual situation should be

available. The first variable that is taken into consideration is: actual situation. The next variable is context. Six questions are raised about the illusion of control and time pressure, to be answered by either a 'yes' or 'no'. From these questions an idea of biases in the decision-making process about the coverage ratio is established. The third and final variable for this phase is: problem recognition. This variable is of importance because when a situation is not seen as a problem it will not be addressed as such. Questions will be raised about whether the topic coverage ratio is an issue or not and whether that is a joint position. Table 3-3 shows the overview of the variables and indicators phase 2.

Number	Process phase	Variable	Indicator
2	Awareness	Actual situation	Who is responsible for putting the subject on the agenda of the board meeting? Own responsibility or agreed?
		Context	Illusion of control? Time constraints?
		Problem recognition	Is the topic an issue? Is there common agreement on it? Is a recovery plan made up?

Table 3-3: Overview of variables and indicator in phase 2.

The activity of recognizing problems is built around relationships and shared information, and the shared interpretation of this information. It would also suggest that a linear process for solving problems might not be the most effective process. This means that default settings like procedures and checklists could contribute to less complexity of information, and completeness and correctness of information, which enters the organization. Data would become less multi interpretable.

3.3.3 Phase 3: Analysis

When the actual situation is recognized as a problem to be solved, the analysis phase starts. This phase has two indicators. The following Table 3-4 shows the variables and indicators of this phase.

Number	Process phase	Variable	Indicator
3	Analysis	Meeting preparation	Who sets the goal for the board meeting? Who sets the agenda? Were alternatives looked for?
		Meeting	Were goals set for each agenda item? Were the options explained? Did this happen during the research period as well?

Table 3-4: Overview of variables and indicator in phase 3.

The analysis phase contains two key sub processes: the debate and decision comprehensiveness. These two decision-making sub processes represent important but distinct aspects of decision making (Simons et al., 1999). Whereas debate involves challenge in the decision-making process, comprehensiveness involves a process of generating many alternative course of action, thoroughly analyzing all strategic options, and using multiple criteria in making decisions. It is possible to come without comprehensiveness (Simons et al., 1999), such that members propose different options that are not given sufficient consideration. However, it is anticipated that the level of debate enhances comprehensive decision-making. Greater comprehensiveness reflects a more exhaustive decision-making approach, involving consideration and analysis of a wide array of information and many courses of action (Fredrickson and Mitchel, 1984). In the process of meeting preparation it is important to know who is involved. It has to do with the problem recognition of the previous phase but also with the translation of the topic. This is also known as “social construction” (McCombs and Shaw, 1972). Media can extend this view of the constructed reality. Media have the ability to tell the audience what issues are important or more specifically what to think about. The rationale is that the media provide cues to which issues are important; and consequently, audience members accept those cues regarding salient issues and then adopt them as their own (Becker, 1982). Berger and Luckman (1991) talk about the “social distribution” of knowledge. This is knowledge, which is shared within a

group. This “distribution cognition” (Gergen, 2009) will enhance the quality of the meeting.

Was the board actively in charge to conduct an action or was the board just herding. Rubbaniy et al. (2011) provided evidence that Dutch pension funds are active traders and trade about 8.5% of their investment portfolio on a monthly basis. The recent financial crisis had a positive impact on both turnover and herding while it negatively affected feedback trading. Using this strategy means buying stocks when prices decline and selling stock when prices rise. Herding contains a risk (Slottje, 2011b, Rubbaniy et al., 2011, Slottje, 2011a) due to the fact that the added value of the action that arises from the herd behaviour is not mapped out in advance. Possible explanations of these herding effects are:

1. Outsourcing of portfolio management and imitation of large pension funds lead to the same kind of asset allocation strategy.
2. Many pension funds often hire the same large and reputable asset management firms for their portfolio management and are likely to have the same asset allocation of their portfolio.

3.3.4 Phase 4: Action

The action phase is the final phase of the model. The only variable in this phase is called decision. There are eight indicators questioned within the variable. The answer of five indicators can be ‘yes’ or ‘no’. If the answer is no, then the motivation behind this negation becomes important. The following Table 3-5 shows the variables and indicators of this phase.

Number	Process phase	Variable	Indicators
4	Action	Decision	<p>Are decisions registered?</p> <p>Are decisions communicated to the (former) participants?</p> <p>Is it recorded who implements the decision?</p> <p>Is it recorded who checks the implementation?</p> <p>Is recorded who reports to the board?</p>

Table 3-5: Overview of variables and indicator in phase 4.

For a traceable decision, it is important that the decisions are documented. This is one of the indicators. In a report (De Nederlandsche Bank, 2012d) the supervisor it documented that minority opinions were “slain” in the preparation of the decision-making. Another one is, due to governance purposes, whether the decisions are communicated to the stakeholders. For the integrity of the board and their actions it should be decided and noted who is responsible for the execution of the decision and who is in control of the actions. This counts for every decision made by the board, so also for the specific subject of coverage ratio. The particulars of implementation vary widely from decision to decision, but virtually all decisions require effective implementation to be successful.

3.4 Conceptual Research Model

All the different phases, variables and indicators are grouped in a model, which is shown in Figure 3-1.

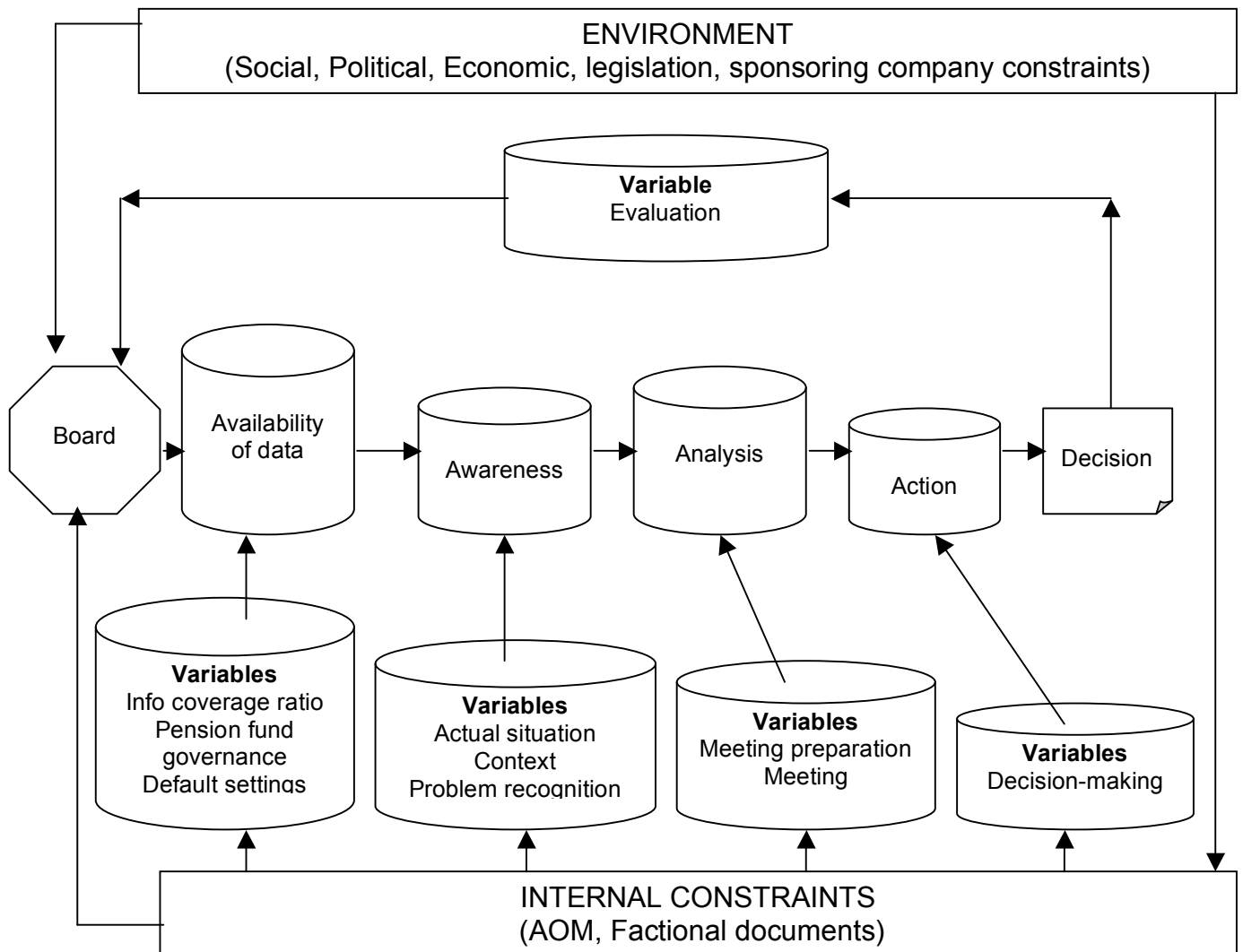


Figure 3-1: Conceptual Research Model.

3.5 Overview of Phases, Questions and Fundament

In the following Table 3-6 an overview is shown of the relationship between the phases of the conceptual research model, the questions which are raised per phase and the legal fundament of it, the necessary translation of it in internal documents and finally the required pension fund governance function.

Phase of conceptual research model	Principles based on law	Principles to be translated in factional document	Pension fund governance function
	IOPS- rule	Mission, vision, strategy	Careful management
	IOPS-rule	Description of decision-making processes	Careful management
1: Availability of data. (Question: Was the board in control?)	Controlled and sound operations (art. 33) Outsourcing (art. 34) Control and integrity of business operations (art. 143) Business processes and business risks (art. 18-22)	Controlled and sound operations (AOM) Financial assessment (AOM) Risk management (AOM) Process of preparation of meetings or decisions (documents)	Careful management & Internal supervision Accountability, Internal supervision & Expertise Internal supervision, Expertise & Openness
2: Awareness (Question: Was the board adaptive to the situation?)	Controlled and sound operations (art. 33) Business processes and business risks (art. 18-22)	Controlled and sound operations (AOM) Financial assessment (AOM) Risk management (AOM) Process of preparation of meetings or decisions (documents)	Careful management & Internal supervision Accountability, Internal supervision & Expertise Internal supervision, Expertise & Openness

Phase of conceptual research model Cont'd	Principles based on law	Principles translated in factional document	Pension fund governance function
3: Analysis (Question: Was the board ready to respond?)		Financial assessment (AOM) Risk management (AOM) Responsibilities of committees or officials (internal documents) Process of preparation of meetings or decisions (internal documents)	Careful management, Accountability, Internal supervision & Expertise Careful management, Accountability, Internal supervision & Expertise Internal supervision, Expertise & Openness
4: Action (Question: Did the board take action?)	Balanced interest (art. 105) Control and integrity of business operations (art. 143) Business processes and business risks (art. 18-22)	Risk management (AOM) Responsibilities of committees or officials (internal documents) Process of preparation of meetings or decisions (internal documents) and communication	Careful management, Accountability, Internal supervision & Expertise Careful management, Accountability, Internal supervision & Expertise, Openness & Communication Internal supervision, Expertise, Openness & Communication

Table 3-6: Overview of phases, questions and pension fund governance function

3.6 *Summary*

Summary Table for Chapter Three

1. Development of the conceptual research model for analyzing decision-making processes.
2. It has been argued that effective decisions must be based on organizational goals and accurate information about the likely relationship between choices and outcomes.
3. Choices made on inadequate or incorrect information could lead to disappointing outcomes.
4. The phases of the model, variables and indicators are integrated in the questionnaire (see Appendix C).

4 Research Methodology

4.1 Introduction

In the previous chapters the theoretical background underpinning decision-making processes and research model was developed through a review of practice and existing literature. This procedure led to the development of the research question, which for format reasons, was established in Chapter 1. The purpose of this research is to investigate the existing situation (Collis and Hussey, 2003) within a sample of Dutch company pension funds. This chapter deals with how the study was conducted. It will discuss the motivation for the choices made during the conducting of this research, as well as the choice for the selected epistemological and ontological perspective. Lincoln and Guba (1985) posit that epistemological orientations provide researchers with the guiding principles for their methodologies.

4.2 Methodology

The choice of which method to employ is dependent upon the nature of the research problem. Perhaps choosing a philosophical stance is not vital to the proper utilisation of research methodology. However, Holden and Lynch (2004) state that if a researcher perceives ontology and epistemology to be irrelevant, then how can they ensure that their methods are appropriate to the problem in hand?

Morgan and Smircich (1980) argued that the actual suitability of a research method derives from the nature of the social phenomena to be explored. They find that there are two methodological approaches in social science: Positivism and Post-positivism. Discussions continued in the social and behavioural sciences regarding the superiority of one or the other of the two major social science paradigms or models. These two models are known alternately as the positivist/empiricist approach or the constructivist/phenomenological orientation (Guba and Lincoln, 1994). The positivist paradigm underlies what are called quantitative methods, while the constructivist paradigms underlies qualitative

methods (Tashakkori and Teddlie, 1998). Denzin and Lincoln (1994)¹⁰ explained what qualitative research is. To them it is searching for in insight, discovery and interpretation, rather than hypothesis testing. Gordon (1991) has posited that all we can do as researchers is to qualify research findings as contextually explanatory and probably capable of generalisation, rather than in insisting that findings are absolute fact. According to Guba and Lincoln (1994) the ontology of post-positivism is critical realism. They postulate that reality is assumed to exist but to be only imperfectly apprehendable because of basically flawed human intellectual mechanisms and the fundamentally intractable nature of phenomena. The epistemology is modified dualist/objectivist. Special emphasis is placed on external 'guardians' of objectivity such as critical traditions (do the findings 'fit' with pre-existing knowledge?). Replicated findings are probably true but always subject to falsification. Some methodology researchers (Patton, 1990, Brannick and Roche, 1997) urge the use of both quantitative and qualitative methodologies in order to triangulate results. Gill and Johnson (1997) perceive that a multi-method methodology leads to a convergent validation of research results through internal cross-checking. The danger of not using a multi-method approach is highlighted by the anthropologist, Richard Wilk (2001). However, when using mixed method which combine qualitative and quantitative approached in the methodology of a study (such as in the data collection stage) testing of propositions is feasible. Alvesson and Sköldbberg (2009) claim that critical realism is a framework that competes with and has named itself as the leading alternative to and successor of positivism and post-positivism and social construction. However they themselves mention that this claim remains to be realized. It can be mentioned, for example, that the approach is not that well known in the US. This research uses critical realist theoretical lens (Doe, 2009) as approach because its

¹⁰ "qualitative implies an emphasis on processes and meanings that are not rigorously examined, in terms of quantity, amount, intensity or frequency. Thus, there are instances, particularly in the social sciences, where researchers are interested in insight, discovery and interpretation, rather than hypothesis testing." DENZIN, N. K. & LINCOLN, Y. S. (1994) *Handbook of Qualitative Research*, Thousand Oaks, Sage Publications.

interpretation of the structure-agency debate¹¹. This project studies social reality as a concrete process. The ontological stance influences the core assumptions concerning epistemology and human nature. According to Morgan and Smircich (1980) reality is all imagination. Therefore, the relevant epistemological stance is that knowledge cannot be discovered, as it is subjectively acquired, everything is relative. Therefore in this research facts are gathered and measured to discover how often certain patterns occur. One should take into account that for researching propositions the results are only applicable for the participators and not for the entire population. The research objective, guide the research to be: exploratory. This is applicable for researching and discovering new areas of research. An exploratory research is undertaken when few or no previous studies exist. The exploratory of this research is the demonstration of the usefulness of the conceptual model. The aim of such a study is to look for patterns, hypotheses or ideas that can be tested and will form the basis for further research (Neville, 2012).

4.2.1 Use of Case Study in Research

A number of qualitative studies have been carried out in the past (Kaplan, 1993, Ryan et al., 2002, Lillis and Mundy, 2005, Lukka, 2005, Eriksson and Kovalainen, 2008). Those studies were focussed on the functioning of accounting in action. Kaplan (1993) claimed that applying traditional research methods, such as analytic modelling, and statistical observations and analysis on contemporary management accounting issues is not a useful method. He showed that there are many complex activities inside the organizations, which cannot be observed with traditional research methods. Kaplan and Norton (1993) used the case study as research strategy to study how the balanced-scorecard combines management and measurement in different organizations. Three cases were involved in the study. Eysenck (1976), who originally saw the case study as nothing more than a method of producing anecdotes, later realized that looking carefully at individual cases could be a contribution in the

¹¹ The social science dictionary defines agency as the capacity of humans to act independently and to make their own free choices, while structures refer to institutions, culture and social codes which constrain or influence individual actions. See online Social Science Dictionary, available at <http://bitbucket.icaap.org/dict.pl>, accessed 30/10/2013.

hope of learning something. Robert Yin (2003) stated that case studies due to its richness is also scientific research. The distinctive need for case studies arises out of the desire to understand complex social phenomena, because the case study allows investigators to retain the holistic and meaningful characteristics of real-life events. Yin (2003: 11) argues that case study is the most appropriate method if the inquiry is concerned with the 'how' and 'why' of a social phenomenon and if 'the boundaries between the phenomenon and its context are not clearly evident'. The case study approach is different from other research strategies because of its openness to the use of indicative a priori propositions. The goal will be to generalize theories (analytical generalization) and not to enumerate frequencies (statistical generalization). Flyvbjerg (2011)¹² agreed on that. Hartley (1994) argued that case study research is a heterogeneous activity covering a range of research methods and techniques, a range of coverage (from single case study through carefully matched pairs up to multiple cases), varied levels of analysis (individuals, groups, organizations, organizational fields or social policies) and differing lengths and levels of involvement in organizational functioning. Flyvbjerg (2011) came up with the following Table 4-1:

¹² "The main strength of the case study is depth-detail, richness, completeness, and within case variance-whereas for statistical methods it is breadth. If you want to understand how widespread the phenomenon is, how it correlates with other phenomena and varies across different populations, and at what level of statistical significance, then you have to do statistical studies." FLYVBJERG, B. (2011) Case Study. IN DENZIN, N. K. & LINCOLN, Y. S. (Eds.) *The Sage Handbook of Qualitative Research*. 4th ed. Thousands Oaks, CA, Sage.

	Case Studies	Statistical Methods
Strengths	<ul style="list-style-type: none"> • Depth 	<ul style="list-style-type: none"> • Breadth
	<ul style="list-style-type: none"> • High conceptual validity 	<ul style="list-style-type: none"> • Understanding how widespread a phenomenon is across a population.
	<ul style="list-style-type: none"> • Understanding of context and process 	<ul style="list-style-type: none"> • Measures of correlation for populations of cases.
	<ul style="list-style-type: none"> • Understanding of what causes a phenomenon, linking causes and outcomes 	<ul style="list-style-type: none"> • Establishment of probabilistic levels of confidence
	<ul style="list-style-type: none"> • Fostering new hypotheses and new research questions 	
Weaknesses	<ul style="list-style-type: none"> • Selection bias may overstate or understate relationships 	<ul style="list-style-type: none"> • Conceptual stretching, by grouping together dissimilar cases to get larger samples.
	<ul style="list-style-type: none"> • Weak understanding of occurrence in population of phenomena under study. 	<ul style="list-style-type: none"> • Weak understanding of context, process, and causal mechanisms.
	<ul style="list-style-type: none"> • Statistical significance often unknown or unclear. 	<ul style="list-style-type: none"> • Correlation does not imply causation.
		<ul style="list-style-type: none"> • Weak mechanisms for fostering new hypotheses.

Table 4-1: Complementarity of Case Studies and Statistical Methods (source: Flyvbjerg 2011).

Due to the fact that this research project is focussed on decision-making processes a number of complex activities are involved. Kaplan (1993) stated that complex phenomena might not be well identified and understood by just observing statistical data. Therefore are several reasons why the case study approach is chosen, because: 1) due to time and money constraints, it is impossible for this research to study the entire population 2) there is no guaranteed access to the entire population of Dutch company pension funds and 3) another argument is that a survey would not have worked because of the expected high non-response and the superficial data that don't provide insight into a process where it is precisely in this study is all about and 4) the case study approach is different from other research strategies because of its openness to the use of indicative a priori propositions. Therefore a sample has to be selected (Kumar, 2005).

4.2.2 Key Steps to Undertake

Yin (2003) shows the process of a case study project as projected in Figure 4-1. Descriptive case studies will be conducted.

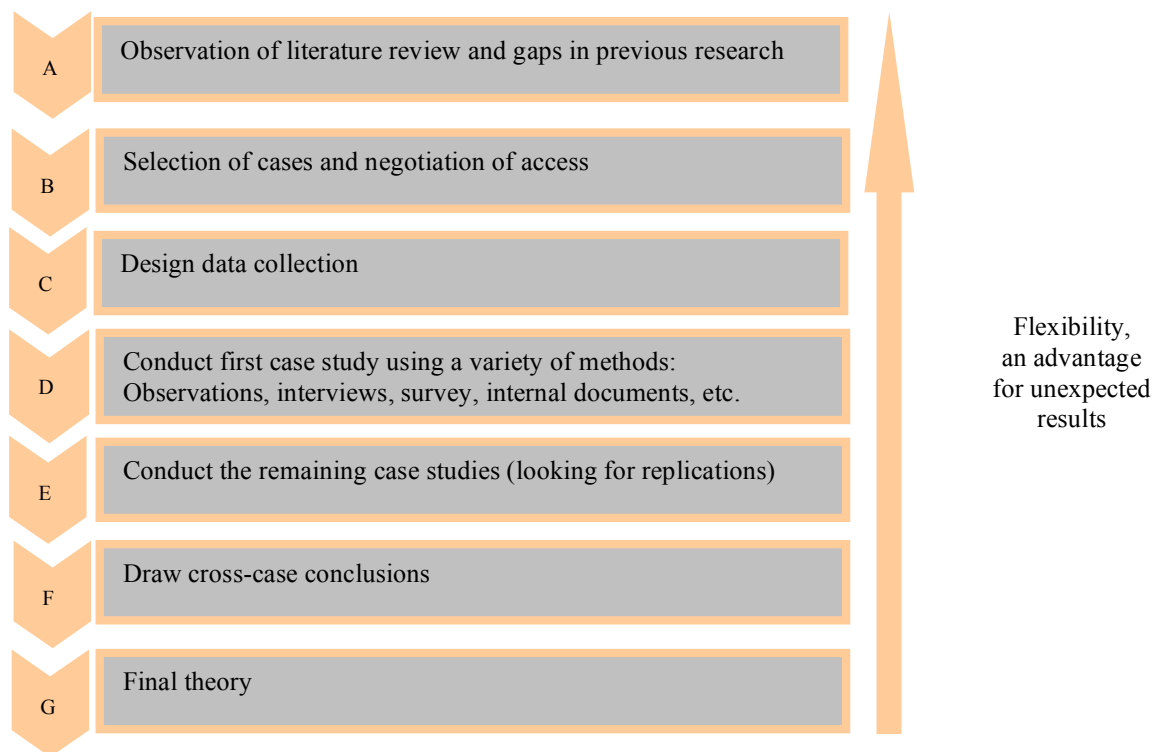


Figure 4-1: Key steps to undertake a case study (source: Yin 2003).

The steps shown in Figure 4-1 will be followed in the project. However, one step is added. Due to the fact that the Dutch pension fund sector can be separated into different categories the first step is to select which category will be the focus. Hereafter an explanation will be given for the selection of the category in the Dutch pension fund sector.

4.2.3 Sampling Procedure Selecting Pension Fund Categories

The following categories (see Section 2.6.2) and numbers of pension funds were found during the researched period, from July 1, 2008 – April 1, 2009 (De Nederlandsche Bank, 2010a), accessed January 18, 2011.

	Pension fund category	July 1, 2008	%	Oct. 1, 2008	%	Jan. 1, 2009	%	April 1, 2009	%
1	Industry-wide Pension Scheme (compulsory membership)	70	10	69	10	69	11	69	11
2	Industry-wide Pension Scheme (non-compulsory membership)	25	4	26	4	22	3	22	4
3	Company pension funds	553	83	543	83	526	83	503	82
4	Company savings funds	5	1	4	1	5	1	5	1
5	Occupational pension funds	13	2	13	2	13	2	12	2
6	Special legislation	1		1		1		1	
	TOTAL	667	100	656	100	636	100	612	100

Table 4-2: Categories and number of pension funds July 2008 – April 2009.(source: (De Nederlandsche Bank, 2010a)

Looking at Table 4-2 the category of Dutch company pension funds (nr 3) is chosen to select cases from, for the following reasons:

1. The Netherlands is the home base of the researcher.
2. The number of pension funds in the category. This increases the chance that an organization will participate in the research.
3. The influence that the company may have on the decision-making process within the pension fund board. Davis et al. (2007) presents in their study empirical evidence on the influence of sponsoring companies on the funding and on the portfolio allocation of pension funds.
4. The special arrangements, which can exist between the company as financial sponsor (administration agreement) and the pension fund as executor of the pension agreement.

As a result of the aforementioned criteria company pension funds are chosen to be the category from the sample to be extracted.

4.2.4 Sampling Procedure Selecting the Cases

Flyvbjerg (2006) comes up with the following Table 4-3 which is the basis for selecting the case(s).

Type of Selection	Purpose
A. Random selection	To avoid systematic biases in the sample. The sample's size is decisive for generalization.
A1. Random sample	To achieve a representative sample that allows for generalization for the entire population.
A2. Stratified sample	To generalize for specially selected subgroups within the population.
B. Information-oriented selection	To maximize the utility of information from small samples and single cases. Cases are selected on the basis of expectations about the content of information content to be acquired.
B1. Extreme/deviant cases	To obtain information on unusual cases, which can be especially problematic or especially good in a more closely defined sense.
B2. Maximum variation cases	To obtain information about the significance of various circumstances for cases process and outcome (e.g., three to four cases that are very different on one dimension: size, form of organization, location, budget).
B3. Critical cases	To achieve information that permits logical deductions of the type "If this is (not) valid for this case, then it applies to all (no) cases."
B4 Paradigmatic cases	To develop a metaphor or establish a school for the domain that the case concerns.

Table 4-3: Strategies for the Selection of Samples and Cases (source: Flyvbjerg, 2006)

The number of company pension funds with an insufficient coverage ratio has grown from 0 in Q1 2007 to 241 in Q1 2009 (De Nederlandsche Bank, 2010a). In other words it has grown from 0% to 78.5% in Q1 2009. In Q1 2009 only 66 Dutch company pension funds had a sufficient coverage ratio.

The B2 scenario (maximum variation cases) is selected as a research strategy. This is done because: it provides a possibility to find out what the differences are between the decision-making processes of different pension funds.

4.2.5 Set up the Selection of the Cases

For the purpose of this thesis it is important to find key members of Dutch company pension funds and convince them of the importance of the project. This was done in two ways. Firstly an appointment was made with the Dutch association of company pension funds to find out whether the association wanted to help the project to succeed. They could do so by writing a letter of recommendation for their members. On June 24, 2010 this meeting took place. The interviewee agreed to the use of a voice recorder. During the interview the question was raised whether the Association wanted to help the project to succeed. They could do so by drawing up a recommendation to their members, and in their newsletter regularly disclose the investigation. The interviewee did not want to answer immediately, and asked for reflection period. When asked why he did not answer immediately, he gave an answer.¹³ Due to integrity reasons (British Sociological Association, 2002) the literal content from the interview should not be included here. The text came down to: it is a delicate issue. However, due to the decision not to publicly disclose the thesis the literal answer is inserted because it shows a fear which was illustrative. On the question what he meant by that the interviewee answered.¹⁴ During telephone contact the spokesman told that the Association did not want to cooperate.¹⁵ The researcher regrets the attitude shown. However, participation should be based on freely given informed consent. In fact the answer means that pension funds as a sector is not 'open', not 'proactive', and is determined to tackle the challenges in the sector itself. The risk is avoiding the opportunity to learn. This attitude of avoiding or even neglecting cognition

¹³ Translated by researcher: "You touch the pension funds directly and in the middle of the hart." Response of spokesman Dutch association of company pension funds during interview conducted June 24, 2010.

¹⁴ Translated by researcher: "Although the information would be treated as highly confidential, there is always a possibility that the funds will be identified, even though the researcher strives for anonymity. Finally, the board is jointly and severally liable for the board decisions. Due to this board liability it is not attractive for pension funds to participate." Response of spokesman Dutch association of company pension funds during interview conducted June 24, 2010.

¹⁵ Translated by researcher: "due to the sensitive nature of the research question, the Association would not encourage pension funds to participate in the research." Response of spokesman Dutch association of company pension funds July 1, 2010.

distribution (Gergen, 2009) (see 3.3.3) needs to be changed. Then it will be possible to capture the decision-making process, and establish what improvements can be made.

In the theory of social exchange (Blau, 1964) it is argued that an individual's actions are often motivated by the "rewards" they are likely to receive from others. This was incorporated in the second attempt to motivate participation in this research project. A written request was drawn up. This request addressed the following topics:

1. A summary of the research.
2. Why it is important for the named pension fund to participate?
3. What participation would entail for the pension fund?
4. What benefit will be gained by the pension fund if they participate?
5. A request to get acquainted and to decide on participation in the research.

Due to the fact that the researcher is financing it privately no special attention was given to that subject (financing the research) although it is part of the applied ethical practice.

4.2.6 Negotiation of Access

The researcher has frequent contacts with pension funds. Access to boards of pension funds seems guaranteed. Between April 12, 2010 and February 18, 2011, 22 pension funds and one association were invited to participate (see 4.2.6.1). This is 4.4% of the total number of pension funds and 5.5% of the total number of company pension funds ultimo Q1 2011.

4.2.6.1 Getting Access to Empirical Data

The Dutch association of company pension funds did not want to encourage funds to participate. Since that moment it was solely the responsibility of the researcher to find funds prepared to join the research project. The first and exploratory stage was to ensure collaboration. To meet the substantial diversity among pension funds in number of participants, former participants, ratio of participants and invested assets and insurance liabilities, if required, the

participating organizations will be selected from the different supervision categories. This creates a better comparison in decision-making processes. The supervisor uses five categories, which are grouped on the basis of the insurance provisions (hereinafter referred to as the IP). The supervisor uses the following categories:

1. IP smaller than 10 million.
2. IP between 10 and 100 million euros.
3. IP between 100 and 1,000 million euros.
4. IP between 1,000 and 5,000 million euros and
5. IP of more than 5,000 million euros.

The selection of cases will focus on category 2-4, because the majority of Dutch company pension funds are in those categories.

After an intensive exercise it was feasible to contact 22 company pension funds. Gathering the names of funds and board members to be contacted went as follows:

1. Known board member were contacted by the researcher and asked whether their organization would like to participate.
2. Known board members were asked to give names of other board members of other pension funds.
3. It was asked around whether known people knew other pension fund board members.
4. A list of attendees of a public congress was taken and googled for address information.

Despite these contacts, the question to cooperate in the research project was often answered negatively. Of the group of 22 pension funds, 10 pension funds immediately refused their cooperation. Eight of the 12 remaining contacts responded otherwise. Ultimately, four company pension funds agreed to participate of which two needed to submit a legally required recovery plan to the supervisor. Finally only one of the participating pension funds needed to submit a recovery plan to the supervisor. After consultation with the responsible Minister, the supervisor decided in that it was not necessary for re-insured pension funds to submit a recovery plan. One participating organizations turned out to be in this specific group.

Reason	Supervision category 2	Supervision category 3	Supervision category 4
1 st attempt	10 organizations	10 organizations	2 organizations
Immediate refusal	5 organizations	4 organizations	1 organization
Left over	5 organizations	6 organizations	1 organization
Refusal after initial agreement	3 organizations	5 organizations	0 organizations
Participating organizations	2 organizations	1 organization	1 organization

Table 4-4: Overview of conducted contacts.

Taken into account the Supervision categories the following Table 4-5 of participating organizations can be drawn.

Case number	Insurance liabilities ultimo 2008	Coverage ratio ultimo 2008	Supervision category
1	1,266 million euros	116 percent	4
2	60 million euros	101.7 percent	2
3	345 million euros	127.6 percent	3
4	31 million euros	102.1 percent	2

Table 4-5: Participating organizations.

The cases meet the requirements of B2 mentioned in Table 4-3. They are very different on one dimension the value of the insurance liabilities and therefore the supervision category.

A group of eight pension funds, which were asked to participate and initially verbally agreed, refused in a later stage when asked to confirm their participation in writing. Refusal to participate whenever and for whatever reasons the wish is conceived in the ethical practice.

A brief overview of the answers are grouped and shown in the following Tables 4-6 – 4-13. Those tables can be seen as being part of the research project. It has been investigated why the organizations did not want to participate. The given reasons for not participating in the study vary. The success of this research was the exceptional granting of access to four cases. Lack of such

access could well be the reason why research of this nature has not been previously achieved.¹⁶

4.2.6.2 Reason for Refusal: Secrecy

In order to keep anonymity a non-disclosure agreement was developed. For two out of eight organizations this proposal was not enough to safeguard their identity and win their participation, even a verbal explanation about the research and the way it would be conducted did not lead to a change of view. An overview of the answers given is shown in Table 4-6 and Table 4-7, which follow hereafter.

Subject	Information
Organization	Non participating company pension fund no. 1
Coverage ratio	Ultimo 2007: 160.8%. Ultimo 2008: 88.2%. Ultimo 2009: 108.2%.
Supervision category	3
Date initial (verbally) agreement to participate	April 12, 2010
Date of refusal to participate	May 24, 2010 (by phone)
Reason	Spokesman says: "Board is afraid that information will not be kept as secret as proposed".
Additional information	The Dutch supervisor (DNB) reinforced supervision by inquiring into the cause of the loss of approx. 50% of the value of the assets. The recovery plan is initially rejected by DNB.

Table 4-6: Answers given by non-participating pension fund no. 1.

¹⁶ In 2012 and 2013 dr. H.M. Prast (2013), Professor of Personal Financial Planning at Tilburg University had the same difficulty of getting access to data. Prast and one of her students found that it was not easy to receive information from pension funds about the administrative burden of mandatory information. Quite a few funds did not want or could cooperate.

Subject	Information
Organization	Non participating company pension fund no. 2
Coverage ratio	Ultimo 2007: 136.5%. Ultimo 2008: 95.2%. Ultimo 2009: 99.4%.
Supervision category	3
Date initial (verbally) agreement to participate	May 7, 2010
Date of refusal to participate	June 10, 2010 (by phone)
Reason	Spokesman says: "Chairman is afraid that the non-identifiable information will leak to the pension fund. He does not believe that secrecy is possible".
Additional information	Four asset managers are involved. On March 2, 2012 a publication appeared in a national newspaper. It stated that after investigation it has been established that the financial sponsor at the turn of the century has received money from the pension fund as dividend. In 2013 the fund threatens to have six or seven percent cuts in the pension entitlements and therefore the benefits. Currently (May 2012) the fund is busy with liquidating and transferring the pension entitlements to an insurer and two non-compulsory industry-wide pension funds.

Table 4-7: Answers given by non-participating pension fund no. 2.

As an addition to the information shown in Table4-7 it is possible that the transfer of money from fund to financial sponsor also happened at other funds. In a national newspaper an article (Hermanides, 2012) appeared on May 25, 2012 with an intriguing headline.¹⁷ ABP is the pension fund employees in the government, public, and education sector and it is the largest pension fund in the Netherlands in terms of participants, assets and liabilities. When the money was taken the fund had a very high coverage ratio, and an overabundance of money. In the 1990s it was not unusual that the financial contract between the company (employer) and its own pension fund had a special provision. The provision arranged that if the coverage ratio crossed a stated limit the surplus should accrue to the company. Although this was not illegal, one can still

¹⁷ Translated by researcher: "Pension fund ABP for the first time told its customers that the Government has taken 30 billion euro in the past." HERMANIDES, E. (2012) ABP rakelt "greep in kas" op. *Het Financieele Dagblad*.

consider the action as inappropriate. The same counts for the non-participating company pension fund # 2 as shown in Table 4-7. In that case, the financial sponsor (company) received a significant amount of money as dividend because it was legally agreed. In both cases, the transfer of the money took place before or around the turn of the century. The continuous pressure of participants and the openness which is so important today, allowed for the creation of painful situations when the sequence of events was revealed to the participants afterwards. Incidentally, ABP is not the only pension fund where money was transferred from the pension fund to the financial sponsor. The same applies for, Philips, Unilever, ABN Amro, Unisys among others. Moreover, there is little visibility on this practice. As Secretary of State in 2002, the current Prime Minister promised that an investigation would be conducted to find out which fund had done this and how much money was involved. That research is never materialized. A secret pilot conducted by the government in 2012 into fewer than five company pension funds showed that one billion euros was taken and refunded to the employer. The current Secretary of State did not want to undertake more detailed research because of the costs involved, the reliability of the data and the reluctance of funds to cooperate (van Baars, 2012). The fact remains that, if the money was not paid to the financial sponsor, the chance that a cut on the pension entitlements and retirement benefits would not be necessary, is very substantial. Today it is publicly known that both the ABP and the non-participating company pension fund # 2 cut the pension entitlements and retirement benefits as from April 1, 2013 because the coverage ratio did not increase before December 31, 2012.

4.2.6.3 Reason for Refusal: Time

As mentioned before, the second attempt to motivate participation in this research project was a written request. In the document a specific section is called: What participation would entail for the pension fund. In collaboration with the pilot organization it was empirically tested how long it would take in term of time spent from the participating organization. The completion took between 15-20 minutes. The pilot organization was asked whether this would be too long.

Their answer was NO. This information was part of the document. Nevertheless four organizations refused to participate at a later stage. Tables 4-8 – 4-11 shows the overview of the given answers.

Subject	Information
Organization	Non participating company pension fund no. 3
Coverage ratio	Ultimo 2007: not known. Ultimo 2008: approx. 98%. Ultimo 2009: unknown.
Supervision category	2
Date initial (verbally) agreement to participate	July 12, 2010
Date of refusal to participate	August 16, 2010 (by mail)
Reason	Spokesman says: "our attention was more focused on strategic choices of the fund rather than funding and investment in itself."
Additional information	The pension fund is liquidated. It transferred the pension obligations to an insurer.

Table 4-8: Answers given by non-participating pension fund no. 3.

Subject	Information
Organization	Non participating company pension fund no. 4
Coverage ratio	Ultimo 2007: not known. Ultimo 2008: approx. 98%. Ultimo 2009: unknown.
Supervision category	3
Date initial (verbally) agreement to participate	September 10, 2010
Date of refusal to participate	November 3, 2010 (by phone)
Reason	Spokesman says: "We are too busy with other things."
Additional information	No additional information available or known.

Table 4-9: Answers given by non-participating pension fund no. 4.

Subject	Information
Organization	Non participating company pension fund no. 5
Coverage ratio	Ultimo 2007: not known. Ultimo 2008: approx. 96%. Ultimo 2009: unknown.
Supervision category	2
Date initial (verbally) agreement to participate	September 20, 2010
Date of refusal to participate	November 12, 2010 (by phone)
Reason	Spokesman says: "after a very short discussion we have decided not to participate. I do not have the time."
Additional information	No additional information available or known.

Table 4-10: Answers given by non-participating pension fund no. 5.

Subject	Information
Organization	Non participating company pension fund no. 6
Coverage ratio	Ultimo 2007: not known. Ultimo 2008: approx. 98%. Ultimo 2009: unknown.
Supervision category	3
Date initial (verbally) agreement to participate	January 25, 2011
Date of refusal to participate	April 1, 2011 (by phone)
Reason	Spokesman says: "We have decided to liquidate the pension fund, so I will not have the time to contribute."
Additional information	After asking spokesman said: "I do not think the board wants to participate". Why: "Perhaps a bit afraid."

Table 4-11: Answers given by non-participating pension fund no. 6.

4.2.6.4 Reason for Refusal: Other

Although the document 'request for participation' was developed to convince the board to participate it was obviously not enough. Two out of eight

organizations refused to participate at a later stage (see Table 12 and Table 4-13) using other arguments.

Subject	Information
Organization	Non participating company pension fund no. 7
Coverage ratio	Ultimo 2007: not known. Ultimo 2008: 92,2%. Ultimo 2009: 97,3%.
Supervision category	2
Date initial (verbally) agreement to participate	May 13, 2010
Date of refusal to participate	May 28, 2010 (by mail)
Reason	Spokesman says: "We never contribute to studies."
Additional information	Currently the pension fund is in liquidation. It transferred the pension obligations to two different insurers.

Table 4-12: Answers given by non-participating pension fund no. 7.

Subject	Information
Organization	Non participating company pension fund no. 8
Coverage ratio	Ultimo 2007: 136,4%. Ultimo 2008: 105%. Ultimo 2009: 109%.
Supervision category	3
Date initial (verbally) agreement to participate	October 14, 2010
Date of refusal to participate	January 12, 2011 (by phone)
Reason	Spokesman says: "I've only been in service since 2009 and do not know what happened before."
Additional information	After asking the spokesman said: "I do not think that the board wants to provide confidential information to an outsider."

Table 4-13: Answers given by non-participating pension fund no. 8.

4.2.6.5 Openness, Transparency and Governance

The answers displayed in the previous tables 4-6 – 4-13, acquired by means of e-mail or telephone, remarkably enough, display a reluctance to participate in this research. It is not further investigated, but there are a few possible reasons why the willingness to cooperate was lacking. The statement made by the spokesman of the Association is probably the best clue. Summarized he said: the answer to the research question is a delicate matter. This can be translated in perhaps fear of liability, loss of respect, the ego, in short there are many reasons to think of, which were not further investigated by the researcher. Therefore, further speculation makes no sense. However, the recalcitrance actually stands in stark contrast to the spirit of pension fund governance, which demands transparency. Participation in the research could have realized this transparency and would have been a paragon of openness and transparency. Weick (1995) describes that the more open an organization is, the more responsive the individuals and groups (teams) are to each other – both internally and externally. When unity and responsiveness are low, the information will tend to become compartmentalized and is not shared readily. However, perhaps transparency is not what the funds want to establish – which is an interesting idea for further research. The fact remains that the collaboration came with great difficulty. In one case even after the collaboration some restraint occurred. One of the participating organizations was asked four times to agree upon a date for the interview, but these requests were never answered. Finally on the 28th June 2012 the researcher succeeded in contacting the chairman of the board of the participating organization to agree on a date for the interview, but the chairman of the board answered he did not want to have an interview. The interview was necessary to verify the accuracy and, the completeness of the information (as will be explained in section 4.3.6). After a lengthy phone call, the chairman eventually agreed to be interviewed. Due to ethical reasons (British Sociological Association, 2002) there is no transcription made of the phone call. The reason for the initial refusal to cooperate shows that there are benefits in enlarging the accessibility of pension funds. Why this closed attitude when there could be lessons to be learned for

them or others? It is recommended to tackle the closed attitude of the pension funds. This should be addressed in a form, that in the sector of pension funds the openness leads to an improvement of the quality of the executive duties of pension funds. The executive duties of a pension fund board are to formulate a policy for contributions, indexation and investments. How this should be implemented one should look at pension fund governance. So it needs to consist of careful management, accountability, internal supervision, expertise, openness, and communication.

4.2.7 Design Data Collection

The project started with a pre-test of the questionnaire with an expert panel that consisted of four practitioners with in-depth knowledge of pension funds. The researcher asked these experts to discuss each survey question and to provide feedback on the content and on the provided instructions. The feedback was used to improve the clarity and design of the survey, making it more appealing for board members to complete. During the entire process of the research the members of the expert panel were consulted several times. Prof. dr. T. Nijman of Tilburg University also provided feedback.

4.3 Methods

The research is built up out of multiple case studies with a retrospective reconstruction of decision-making processes regarding the coverage ratio. Because all cases differ, it is obvious that this type of research design relies on more than one data collection technique. Data accumulated by different methods but bearing on the same issue are part of what is called the 'multi-method approach' (Jick, 1979). The approach is focused on getting the true picture.¹⁸

¹⁸ "Different methods have different strengths and weaknesses. If they converge then we can be reasonably confident that we are getting the true picture." GILLHAM, B. (2000) *Case study research methods*, London, Continuum.

4.3.1 Unit of Analysis

The unit of analysis is the appropriate decision-making process within Dutch company pension funds to establish the coverage ratio. It can be said that such a process contributes to a healthy financial yardstick and all concerned with information required meeting the legal and social requirements and internal regulations of the fund itself.

4.3.2 Pilot Case Study

After the approval of the mini-viva on May 21, 2010 the research project started with the pre-test of the questionnaire followed by a pilot. During that phase and in discussion with the pilot organization new insight information was gained. The pilot case is one of the four participating organizations.

4.3.3 Non-Disclosure Agreement

In order to keep anonymity a non-disclosure of information contract was signed between the researcher and the competent authority of the participating organization.

4.3.4 Additional Measures

The researcher motivated respondents by assuring them confidentiality and offering a summary of the research results and a free workshop on the research findings (information that would be meaningless to them in the absence of accurate data). Complete confidentiality within the scope of this thesis cannot be guaranteed in advance. It would be an unrealistic guarantee. However, a number of measures are taken to this end. Starting with a non-disclosure statement, followed by the secure storage of all information made available and the anonymity of the case descriptions and results. During the research and after the promotion the research results will only be shared with the participating

organizations. Before disseminating anonymous research information, the participating organization will receive a document and verbal explanation covering recommendations on how their situation attributed (possible found) shortcomings can be addressed.

4.3.5 Different Data Sources

To answer the research question and establish the objective of the research, several data sources were consulted. For answering each phase of the model, various sources were used (see Table 4-14). Triangulation of multiple informant responses was used to improve (Patton, 1990, Denzin, 1989, Lincoln and Guba, 1985) and to increase the prospect that responses would be truthful (Denzin, 1989).

	Source	Method of data retrieval	Conceptual research model phase
Document	Annual report 2008	Content analysis	Phase 1
Document	Annual report 2009	Content analysis	Phase 1
Document	Actuarial and Operating Memorandum	Content analysis	Phase 1 and 3
Documents	Agendas of board meetings	Content analysis	Phase 3
Documents	Minutes of board meetings	Content analysis	Phase 4 including the evaluation
Documents	Questionnaires	Content analysis	Phase 1 – 4
People	Chairman of the board	Structured interview	Phase 1 – 4
People	Manager of the pension fund	Structured interview	Phase 1 - 4

Table 4-14: Use of resources for data collection.

4.3.6 Conducting the Case Studies

After the adjustments of the questionnaire the data collection started May 24, 2010. The last questionnaire was returned on 20 August 2012. The recall time frame is restricted to three years or fewer to minimize problems associated with

retrospective data collection (Miller et al., 1997). The last interview took place 12 August 7, 2012. Although this date is beyond the time frame of three years the interview took place because no new information was collected. The purpose was to verify and discuss the conclusions. There was no need for clarification because the received data was clear. Another issue why this interview was important was the rejection of the chairman of the board to participate in the interview. During that period the following activities were conducted.

1. The documents mentioned above (when available) were reviewed during the desk research phase of the project and provided data about the characteristics of the pension fund, the volume of assets and liabilities, the number of beneficiaries, members of the pension plan, and early leavers. An overview of the coverage ratio during the researched period is included, because it demonstrates the need for intervention.
2. Direct communication with the decision-making board members took place via questionnaires.
3. A comparison of existing documents (when available) and the narratives resulting from the completed questionnaires identified inconsistencies and gaps in the “story” that led to a decision.
4. These inconsistencies and gaps were explored in a follow-up in-depth interview with the respondent using semi-structured questions. In the interview attempts were made to reconcile differences and fill in the gaps (Huber and Power, 1985). The interviews were focussed on collecting three answers. Those were:
 5. The accuracy of the information. Is the information correct?
 6. The completeness of the information. Is there missing information?
 7. The verification of the information. Why is the conscious answer given in the questionnaire?
8. To ensure integrity of the data received the researcher telephoned each informant subsequent to the collection of the completed questionnaire to verify that he or she completed the questionnaire.
9. A digital voice recorder was used if the interviewee consented. Those interviews were necessary to get an explanation of the information obtained.

All recordings of interviews are transcribed verbatim. The recordings are stored on one computer and on one external hard disk.

10. For collection of the data questionnaires were used to obtain a standard and uniform approach regarding both the questions asked and the mode in which subjects are addressed.
11. The questionnaires and interviews were in Dutch as agreed during the mini viva May 19, 2010. The reasons for this are:
 - a. The clearness of expression of the interviewees.
 - b. The risk that participation is hampered by the use of the English language.
12. The data collection covered all phases of the conceptual research model.
13. The questionnaires also collected data about some biases. The effect of overconfidence and wishful thinking were taken into consideration.
14. Agendas and minutes of the various meetings during the researched period were gathered, because these documents showed the result of the problem recognition leading to the preparation for the meeting and the meeting itself.

4.3.7 Response Rate

Before distributing the questionnaires it was necessary to establish which of the board members of the participating organizations were also board members during the research period. The decrease of the to be involved board members compared to the official number of members is the result of people's transferring, leaving the company, termination of term of appointment as member of the board and the like. However the high turnover of board members could be a co-incidence but could also be a consequence of doubt of their own expertise, which could lead to voluntary resignation as board member. The new board members were not asked to participate because they were not involved in the decision-making process during the specific time frame. In Table 4-15 an overview is shown of the response rate.

1. Part. Org.	2. Board member	3. Board member during research period	4. No of questionnaires	5. Received questionnaires	6. Response rate (%)
1	8	3	3	2	66
2	4	3	3	3	100
3	8	3	3	2	66
4	5	3	3	1	33
TOTAL	25	12	12	8	66

Table 4-15: Response rate of questionnaires

Column 1: the number corresponding with the participating organization.

Column 2: the number of board members, which should be functioning according to the statutes.

Column 3: the number of board members who were also board member during the research period (1 July 2008 – 31 March 2009).

Column 4: the number of distributed questionnaires. This number differs from the number in column two, because of resignation or expiring term.

Column 5: the number of questionnaires received.

Column 6: the percentage of response rate.

4.3.8 The Questionnaire and Measures

The questionnaire took an average of 20 minutes to complete and was divided into four main sections (translated full version of the questionnaire is attached as Appendix C). In Table 3-6 an overview is given of phases, questions and pension fund governance function. Below are details of how concepts were measured.

1. Availability of data

The variables are: information about coverage ratio, pension fund governance rules and default settings. Per variable different indicators are defined. The pension funds are legally required to report every three months about the coverage ratio to the supervisor, which was the reason for using the same period of time in the questionnaire. If information about one of the two indicators is not available or current, an actual calculation of the coverage ratio is not possible. Formally not having the information to calculate the coverage ratio is in violation of the Pension Act (article 33 and 143). Operations should be organized in such a way that good governance and sound operations are controlled and safeguarded. In other words, a proper system of risk management should be in place, which is also discussed in section 3.5.1. Practically not knowing, within a reasonably margin, the value of the assets or the liabilities means that the rest of the decision-making process is based on guesswork. This is in conflict with proper risk management. On this premise the answers in the questionnaires, agendas, minutes of board meetings and interviews show whether the fund has fulfilled its legal obligations for controlled and sound operations, as well as the internal agreements about preparing meetings or decisions and risk management. Therefore the answers show whether the pension fund board complied with the most basic obligations. It provide an answer to the question if the board was able to respond because without the appropriate information the progress of the process is based on guesswork. This also answers whether the pension fund governance functions careful management, accountability, internal supervision, expertise and openness are configured and lived by.

2. Awareness

In the Awareness phase three variables were examined: actual situation, context and problem recognition. Based on this premise, the answers in the questionnaires, agendas, minutes of board meetings and interviews show whether the fund has fulfilled its legal obligations for the organization of controlled and sound business processes and risks management and to the internal agreements about risk management and preparing meetings or decisions. The answer to the question whether the funds have fulfilled their legal obligations shows whether the board was adaptive to the situation. This

means that the board is aware that something is going on and perhaps intervention is needed. The answers provide a view on the question of whether the board was adaptive to the situation. In short did the board have the ability to respond? This also answers whether the pension fund governance functions careful management, accountability, internal supervision, expertise and openness are configured and lived by.

3. Analysis.

In the Analysis phase two variables were examined: meeting preparation and meeting. The answers to the questions raised show whether the board was ready to respond based on confirmed information. Proper pension fund governance requires discussion, alternatives and information exchange. These are the basics considering the 'Principles for good pension fund governance' (Stichting van de Arbeid, 2005, Vereniging van Bedrijfstakpensioenfondsen, 2006) in which openness and communication are mentioned as principles for good governance. If the board did not respond on confirmed information why did they decide? Did the board decide because others decided as well? This also answers whether the pension fund governance functions careful management, accountability, internal supervision, expertise and openness are configured and lived by.

4. Action

On this premise the answer shows whether the board takes action or not. This also answers whether the pension fund governance functions careful management, accountability, internal supervision, expertise, openness and communication are configured and lived by. It is also considered whether all the decisions were registered very accurate. This is necessary to be able to communicate with the external environment including the (former) participants. This calls for a meticulous registration of the decision in which all the considerations were recorded, including the minority opinions. With all the given answers, an opinion can be formed concerning the appropriateness of the decision-making process regarding the coverage ratio. This opinion will be the start for the recommendations. The recommendations will not only focus on streamlining the decision-making process, but especially on increasing the quality of the decision-making process and hence the exercising of control by the board. When one or more phases do not meet the requirements than there

is a shortcoming in the process. As a consequence there are also shortcomings in governance which is not properly organized and lived by.

As mentioned before Ambachtsheer et al. (2005) published a report in which causes for an excellence shortfall were notified. A follow-on study (Ambachtsheer et al., 2007) analyzed the findings of a new survey and found a positive correlation between governance quality and fund performance.

When case studies show a shortcoming in the decision-making process and a shortfall of coverage ratio it is feasible to conclude that the governance should be improved in the participating organizations.

4.3.9 Content Analysis

In the case of using qualitative content analysis in case study research, triangulation takes place on two different levels. Integrating different material triangulates data and evidence by integrating quantitative and qualitative steps of analysis. By applying a method of qualitative content analysis triangulation takes place, which has not been particularly developed for this purpose. (Kohlbacher, 2006). There are no simple guidelines for data analysis: each inquiry is distinctive, and the results depend on the skills, insights, analytic abilities and style of the investigator (Hoskins and Mariano, 2004). One challenge of content analysis is the fact that it is very flexible and there is no simple 'right' way of doing it (Elo and Kyngäs, 2008). The empirical data is organized as shown in Figure 4-2.

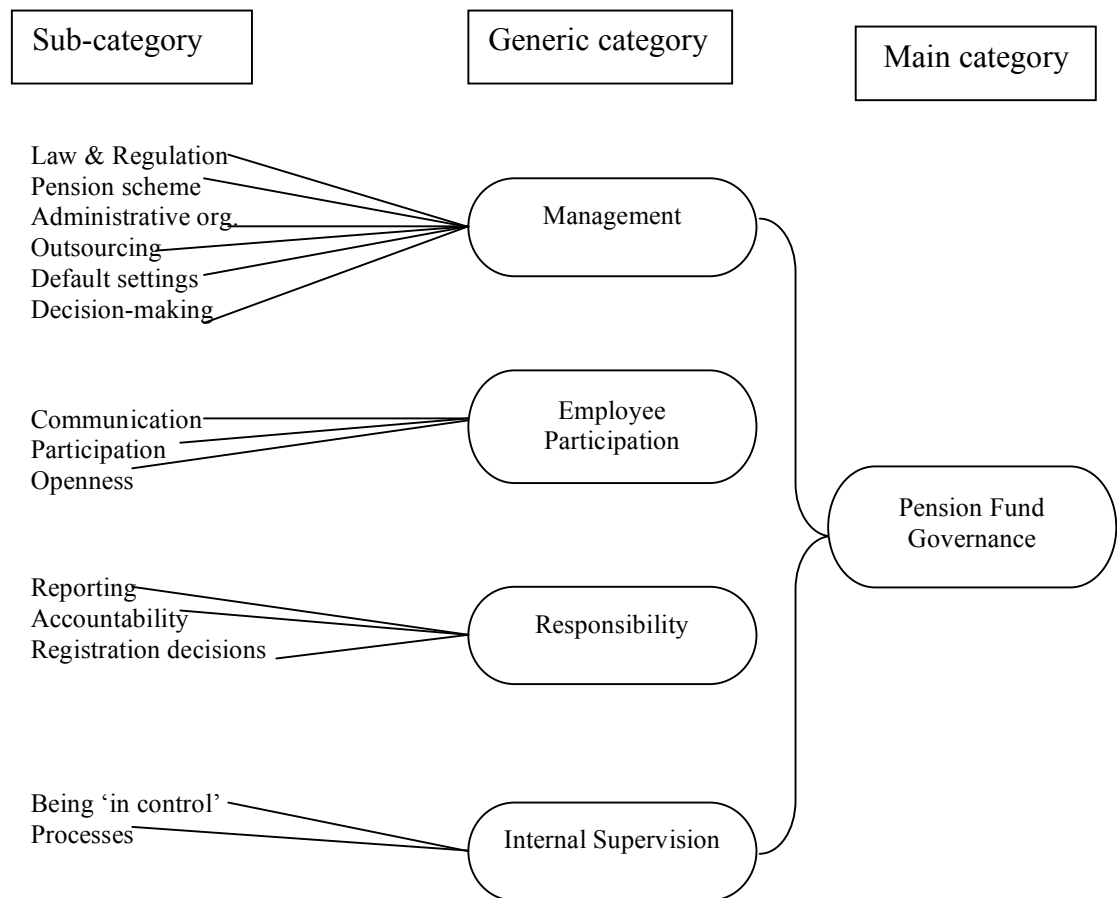


Figure 4-2: Abstraction process

4.3.10 Draw Cross-Case Conclusions

Before cross-case conclusions can be drawn the collected data needs to be analyzed. For the analysis of the data (Marsh, 1988) it is important to distinguish two types of data. The first type, qualitative data, was collected through interviews and questionnaires. The second kind of data, quantitative data, was collected via the questionnaires. For the analysis of the qualitative data, Miles and Huberman (1994) are followed. They offer in their “sourcebook” methods, which are designed to systematically come to conclusions that can be drawn and verified. In their approach (1994: 10) they distinguish three parallel streams of activities within the data collection and processing process: data reduction, data display and drawing and verifying conclusions. These steps

were followed in the data analysis part of the research. To verify the findings, the following tactics were undertaken:

1. Check on researchers' impact through peer feedback.

The researcher attended two peer review workshops every year. The University of Bradford organized those workshops.

2. Triangulation of data sources and collection methods.

The data collected in questionnaires was compared with the data in the annual reports, the AOM, the agendas, the minutes of board meetings and other bodies.

3. Feedback from informants.

The contribution of the expert panel was very valuable. Most of the feedback was collected via mail or telephone. Occasionally a meeting took place with individual members of the virtual panel. The last meeting with one of its members took place July 11, 2012.

4.4 Summary

Summary Table for Chapter Four

1. Answering the question: How can the goals of this research project be achieved?
2. Discussion of the research paradigms with reference to positivism and phenomenology as well as multi method and the choice for the exploratory approach.
3. A discussion of the selection of case study as method, samples, and methods for data collection and analysis.

5. Empirical Data and Findings

5.1 Empirical Data of Participating Organization # 1

Due to the fact that the different case studies vary in terms of design, number of participants, assets and liabilities, each individual section will provide the empirical data per case, starting with a brief outline of the participating organization.

5.1.1 Outline of Participating Organization # 1

The following outline (Table 5-1) is based on four documents (Participating organization # 1, 2008a, 2008e, 2009c, 2010b).

Facts company pension fund # 1	Year 2008	Year 2009
(former) participants		
Participants	4,901	4,756
Former participants	5,159	5,116
Beneficiaries	2,886	2,950
TOTAL	12,946	12,822
Coverage ratio		
Valuation at market value of liabilities	€ 1,266,458,000	€ 1,258,150,000
Assets ¹⁹	€ 1,440,469,000	€ 1,521,466,000
Coverage ratio according to annual report ²⁰	116%	123%

¹⁹ The investment portfolio consisted of 90% fixed income securities and 10% shares and real estate.

²⁰ The calculation of the coverage ratio shows a different percentage than listed in the table and the annual report. The reason for this lies in the interpretation of the rule for the drafting of the annual report. The fund is fully re-insured and, as such, has no equity in the legal sense because all resources are part of the investment depot. The board thinks this is incorrect. Therefore publications about the coverage ratio include the entire capital surplus. In December 2008 this amount was around € 20 million and in 2009 around € 29 million. A calculation of the coverage ratio using the figures shown in the table would result in 113.74% for 2008 and 120.93% for 2009.

Facts company pension fund # 1 cont'd	Year 2008	Year 2009
Board		
General management board	8 members	8 members
Representation of employer	4 members	4 members
Representation of employees	3 members	3 members
Representation of beneficiaries	1 member	1 member
Organization		
Executive Committee	Yes	Yes
Manager/director	1	1
Investment Advisory Committee	Yes	Yes
Supervisory board	No	No
Accountability body	Yes	Yes
Complaints Committee	Yes	Yes
Review Committee	Yes	Yes
Members' council	Yes	Yes
External service providers		
Accountant	Yes	Yes
Actuary	Yes	Yes
Asset manager	Yes	Yes
Administration	Yes	Yes
Government body	No	No
Re-insurance (100% re-insured, type B 1.1 see section 1.3.1)	Yes	Yes

Table 5-1: Outline of participating organization # 1.

To gain better insight into, and to conduct data triangulation about, the decision-making process concerning coverage ratios in the studied organization the following documents were used during the desk research phase:

- Organization chart (Participating organization # 1, 2010b).
- Annual reports 2008 and 2009 (Participating organization # 1, 2008e, 2009c)
- Actuarial and Operating Memorandum (Participating organization # 1, 2008a).
- Five agendas of pension fund board meetings (Participating organization # 1, 2008b, 2008c, 2008d, 2009a, 2009b)
- Five minutes of pension fund board meetings (Participating organization # 1, 2008h, 2008i, 2008j, 2009f, 2009g).

- Four minutes of the Investment Advisory Committee meetings (Participating organization # 1, 2008f, 2008g, 2009d, 2009e).
- Memo to the board (Participating organization # 1, 2010a).

In addition to the aforementioned documents two members of the board completed a questionnaire (Participating organization # 1, 2010c, 2010d).

During 2009 six new board members were appointed. The member representing the employer and the member representing the employees were the only ones who were board members during the research period. Documents containing the Mission, Vision and Strategy and the decision-making process(es) were missing. To check and verify the findings one interview was conducted. This took place on February 22, 2012. The interviewee did not reject the use of a digital voice recorder. The recording of this interview is transcribed verbatim (Participating organization # 1, 2012). As follow up a second meeting took place on March 9, 2012. This was due to the findings based upon the questionnaires. The board member wanted to discuss the differences in the answers because he thought that some of the differences could be explained.

5.1.2 Phase 1: Availability of Data

In this phase it is researched whether the data necessary for the decision-making process about the coverage ratio is available.

5.1.2.1 Information about Coverage Ratio

It is mentioned that the information about the coverage ratio should cover the actual value of assets and liabilities per period. If there is no up-to-date information available concerning the actual value of these assets and liabilities, a calculation of the actual coverage ratio is not possible. In documentation (Participating organization # 1, 2002, 2006, 2008a) one can find the TO BE situation about the process and information exchange. With the information available as described it is possible to calculate the coverage ratio. The previous description of the TO BE situation corresponds with the TO BE situation of the conceptual research model. All the phases in the model are also

found in the various documents. The AS IS situation is determined by the questionnaires and the interview starting with the information about the assets the following is established:

Location	Assets July 1, 2008	Assets Oct. 1, 2008	Assets Jan. 1, 2009	Assets April 1, 2009
Respondent 1	€ 1,370,000,000	€ 0.00 (UNKNOWN)	€ 1,440,000,000	€1,441,000,000
Respondent 2	€ 1,370,000,000	€ 1,350,000,000 21	€ 1,440,000,000	€1,440,000,000
Annual report 2008	Not reported	Not reported	€ 1,440,000,000	
Annual report 2009			Not reported	Not reported
Deviation between highest and lowest reported number	€ 0.00 0%	€ 1,350,000,000 100%	€ 0.00 0%	€ 1,000,000 0,07%

Table 5-2: Fact-finding about assets.

The annual report includes only the amount of assets at 31 December of any year. As an addition to the answer that the value of the assets per October 1 was unknown, one of the responders reported in the questionnaire that no report was available because the concerning reports were not made on a structural basis before 2009. This statement is in contradiction with what is described in the AOM²². Even though the AOM explicates a decision concerning the information flow of the assets, it has not been realized. According to this document the information about the assets should be sent to the Investment Advisory Committee. The committee consists of three members appointed by the board, and supplemented with four participants, which are an advisor, the asset manager, the re-insurance company and a secretary.

²¹ Respondent 2 had made an Excel sheet and calculated the value of the assets himself.

²² Translated by the researcher: "The board receives a monthly asset management report. It also receives the valuation at market value of the coverage ratio and the actual value of the assets. Every three months the asset manager sends the board a report with a reflection on past developments, and a prediction of future developments in the investments markets." PARTICIPATING ORGANIZATION # 1 (2008a) Actuarial and Operating Memorandum. Amsterdam.

Considering the minutes²³ of the board the delegation of responsibilities was not clear. Although the Investment Advisory Committee could not comply with governing rules, it did demand the release of the asset management reports. During the research period the Investment Advisory Committee met twice in 2008 and twice in 2009. The meeting of the Investment Advisory Committee was scheduled previous to the board meeting, so that information can be shared during the board meeting to assist in the decision-making process.

In the meeting of the Investment Advisory Committee of July 2, 2008 (Participating organization # 1, 2008f) it is recorded that the stock fall far back causing a coverage decline. This means that the coverage ratio is in danger and dropping. During the board meeting on July 10, 2008 (Participating organization # 1, 2008h) it is recorded that the external asset manager, within the bandwidth of the investment mandate, is allowed to make changes in the portfolio. In the meeting of the Investment Advisory Committee of October 6, 2008 (Participating organization # 1, 2008f) two important issues were discussed. The first one recorded is as follows: By strong decrease of the value of the equity portfolio the interest of shares in portfolio dropped below the allowable bandwidth. Mandate required to purchases. The Investment Advisory Committee would like to be informed by the asset manager if there is a necessity to depart from the mandate. The second issue recorded is: To come to an improvement of the current month reports elaboration of a proposal must be executed. The Investment Advisory Committee would like to have better view on:

1. How the performance of the asset manager is compared to the benchmark.
2. The development of the matching portfolio compared to the liabilities.
3. The development of the yield portfolio versus benchmark inflation.

²³ Translated by researcher: "It is not clear how far the jurisdiction of this committee (Investment Advisory Committee) extends. This should be the purpose and instructions appear, or the control rules that are made to be. The existing arrangement is that a change in the investment mandate only on the basis of a board decision can be made. A proposal to amend the investment mandate will in principle only be based on the results of an ALM study. To this end the Investment Advisory Committee will be proposed to the board." PARTICIPATING ORGANIZATION # 1 (2008h: 2) Minutes of pension fund board meeting 10-07-2008. Amsterdam.

On October 15, 2008²⁴ the board decided. During the meeting a member of the board asks what the coverage ratio was on September 30, 2008. The answer, which is recorded, reads: 128%. In the past the board has chosen for a 100% re-insurance contract. By doing so, they have chosen to transfer the underwriting risks matching the market risk, credit risk and liquidity risk to an insurer. The underwriting risks include the possibility that participants live longer than expected. Market risk includes the risk that short-term value of investments strongly fluctuates. The credit risk is determined mainly by lower-quality investments. Liquidity risk is the chance that there is temporarily no money available to pay benefits. The transfer of the underwriting risks costs money, but in return the transferred risks are under control or at least limited. As a consequence of transferring some of the risks, the liabilities administration, which covers all the insured liabilities, was also outsourced to the insurer. The insurer needs that administration to carry out their responsibilities as an insurer of the liabilities. For the calculation of the coverage ratio it is necessary to know the value of the liabilities. In the AOM it is recorded, that the board receives a quarterly report on the implementation of the pension scheme by the re-insurer, but this was not included in the Service Level Agreement with the insurer. As a consequence the insurer determined the content of the report. For an insurer it should be feasible to report the actual sum of liabilities on a monthly basis. However, it was not delivered nor could it be enforced, because nothing about the information flow of the liabilities was contractually committed. Yet, the questionnaires show figures of liabilities. In the interview the question was raised how this was possible and on what basis the calculation took place. The answer was that probably it was a best guess. The questionnaires and the annual report 2008 show the following information about the liabilities (see Table 5-3):

²⁴ Translated by researcher: "The Board feels nothing for derogation of the mandate and decides: no derogation." PARTICIPATING ORGANIZATION # 1 (2008i) Minutes of pension fund board meeting 15-10-2008. Amsterdam. Minutes of pension fund board meeting 15-10-2008. Amsterdam.

Location	Liabilities July 1, 2008	Liabilities Oct. 1, 2008	Liabilities Jan. 1, 2009	Liabilities April 1, 2009
Respondent 1	€ 0.0 (Unknown)	€ 0.0 (Unknown)	€ 1,266,000,000	€1,300,000,000
Respondent 2	€ 1,000,000,000	€ 1,080,000,000	€ 1,270,000,000	€1,300,000,000
Annual report 2008	Not reported	Not reported	€ 1,266,000,000	
Annual report 2009			Not reported	Not reported
Deviation between highest and lowest reported number	€ 1,000,000,000 100%	€ 1,080,000,000 100%	€ 4,000,000 0.32%	 0%

Table 5-3: Fact-finding about liabilities.

The annual report includes only the amount of liabilities at 31 December of any year. Looking at the coverage ratio it is no longer surprising that again the respondents provide not the same information, which is shown in the following Table 5-4:

Location	Coverage ratio July 1, 2008	Coverage ratio Oct. 1, 2008	Coverage ratio Jan. 1, 2009	Coverage ratio April 1, 2009
Respondent 1	136.1%	128.2%	115.7%	111.0%
Respondent 2	134%	122%	116%	111.0%
Annual report 2008	Not reported	Not reported	116%	Not reported
Annual report 2009				Not reported

Table 5-4: Fact-finding about coverage ratio.

It was unknown to the researcher how a coverage ratio can be shown in the questionnaires when the information necessary to calculate a ratio is not available. Yet, the questionnaires show an actual coverage ratio for every three months. How this is possible has been asked during the interview. Two answers

are given. One of the respondents used an excel sheet from the insurer made in 2010. The other respondent came up with a figure because he had a personal interest in the subject and he had set up a personal administration. This was used in his calculation.

In one of the questionnaires it has been formulated that coverage ratios are not judged since 2006. Yet during the board meeting of October 15, 2008 (Participating organization # 1, 2008i) the issue of the coverage ratio was a subject of discussion. A figure of 128% is given. How this was possible cannot be concluded from the documents researched. During the board meeting of the January 14, 2009 (Participating organization # 1, 2009f) the subject coverage ratio is discussed again. According to the minutes of the board meeting, the coverage dropped to 116,5%. In December 2008 a member of the board indicates that it is desirable to calculate the actual coverage ratio several times a year. It is obvious that the subject coverage ratio had the attention of the board members. However, actual information about the assets and liabilities was not available. No actions are determined to get the actual information from the asset manager and the insurance company. An action to improve that information flow regarding the coverage ratio was established in 2010. To summarize the results of the questionnaires about the fact-finding stage of the variable of the coverage ratio, the following Table 5-5 can be drawn:

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Assets	2	5				
Total nr. of questions		10	6	60	4	40
Liabilities	2	5				
Total nr. of questions		10	6	60	4	40
Coverage ratio	2	4				
Total nr. of questions		8	4	50	4	50
Other	2	8				
Total nr. of questions		16	6	37.5	10	62.5
TOTAL	2	44	22	50	22	50

Table 5-5: Overview of answers regarding fact finding coverage ratio.

The participating organization # 1 has chosen for a re-insurance contract. By doing this, they have chosen to transfer certain risks to an insurer. However, the matching risk was only 90% covered. The matching risk is the difference between the duration of pension liabilities and the duration of assets. Through this decision the organization agreed with the contractual arrangement made by the insurer. The organization has chosen to set up the rest of their assets a separate assets portfolio to make a profitable use of the rest of these assets. A profitable use can be achieved if investment markets are picking up again to show that there are higher yields, which can be achieved. The results of this assets portfolio can then contribute to the required cash flow matching of 100% and a possible surplus can provide an indexation grant for the increased cost of living, to preserve purchasing power.

To summarize the facts of the first variable of phase 1, which is information about the coverage ratio the following is established:

1. In the questionnaires 50% of the responses on the information about coverage ratio are non-identical answers.

2. The participating organization # 1 has chosen for a reinsurance contract. By doing so, they have transferred the underwriting risks matching the market risk, credit risk, and liquidity risk to an insurer.
3. The board in consultation with the insurer had chosen for hedging the interest risk by a cash flow matching to a size of 90% for five years.
4. The Investment Advisory Committee should receive a monthly asset management report. This policy was not in operation per July 1, 2008 or per October 1, 2008 and January 1, 2009.
5. There are no contractual arrangements or a Service Level Agreement (SLA) with the insurer to provide the sum of the insured liabilities on a monthly basis.
6. A personal administration made it feasible for one of the respondents to show a coverage ratio.

The fact that 50% of the given answers are non-identical is a worrying fact. The board members should have the same information available. By means of data triangulation the correct numbers are checked in the year reports. Without correct information no decisions could have been taken at all. Yet, the process of decision-making went on.

5.1.2.2 Pension Fund Governance Principles

The second variable in the first phase of the research model is pension fund governance. This variable is aimed mainly at the organization and processes of a pension fund. Following a transitional measure, the principles should be implemented at least at January 1, 2009. The question that remains is whether the fund has implemented the required proper governance measures and if so, has the participating organization # 1 lived and worked along required lines of pension fund governance. Based on the Decree on the Implementation of the Pension Act, the following committees should have been installed: Accountability body or Supervisory board, Review Committee, Complaints body, and Members' council. Looking at the participating organization # 1 and Table 5-1, it must be concluded that the bodies required by pension fund

governance were implemented. Hereafter, the facts concerning the participation of different committees in the decision-making process about the coverage ratio are discussed. The minutes of the various board meetings do not show that:

1. The different committees are informed.
2. Responses are received from committees.

The conclusion seems justified that although the pension fund governance bodies were installed, the board had not institutionalized its application.

To summarize the results of the questionnaires about the fact-finding stage of the coverage ratio, the following can be established:

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Pension fund governance	2	14				
Total nr. of questions.		28	24	86	4	14

Table 5-6: Overview of answers regarding fact-finding pension fund governance.

To summarize, the facts of the second variable of phase 1, which is pension fund governance, are as follows:

1. In the questionnaires, 14% of the responses on the information about pension fund governance are non-identical answers.
2. The different bodies required by the pension fund government rules are implemented.
3. The pension fund governance rules are not in operation in the desired size yet, so that the goals of pension fund governance are reached. Discussions about responsibilities were still conducted.

5.1.2.3 Default Settings

Neither default settings, nor references to them were found in the various examined documents. In the questionnaires, questions about different default settings were raised as to whether default settings exist in practice. The answers are shown in the following Table 5-7.

Question: where there default settings for:	Respondent 1	Respondent 2
• Agenda topics?	Yes	No
• Frequency of meetings?	Yes	Yes
• Advance distribution of meeting documents?	Yes	Yes
• Meeting quorum?	Yes	No
• Decision-making quorum?	Yes	Yes
• Communication with (former) participants?	Yes	No
Were checklists used?	No	No
Are the meeting subjects prepared in writing?	Yes	Yes
Did this happen during the research period as well?	Yes	Yes

Table 5-7: Fact-finding about default settings.

Table 5-7 shows that:

1. There is a settled frequency of meetings. The frequency is once every three months (Participating organization # 1, 2008a).
2. There is a disagreement about the meeting quorum and communication with former members.
3. No checklists are used.

To summarize the results of the questionnaires about the fact finding stage of the default settings the following can be established.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Default settings	2	12				
Total nr. of questions		24	18	75	6	25

Table 5-8: Overview of answers regarding fact-finding default settings.

A summary of the facts of the 3rd variable of phase 1:

1. In the questionnaires, 25% of the responses on the subject default settings are non-identical answers.
2. The frequency of the meetings, the advance distribution of the meeting documents and the decision-making quorum are the default settings recognized by the responders.
3. No checklists are used regarding the decision-making process.

Summarizing the facts and the results of the questionnaires one can draw the conclusion for the first phase of the decision-making process, in which three variables of the availability of information are researched. The summary is shown in Table 5-9.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Information about coverage ratio	2	44	22	50	22	50
Pension fund governance rules	2	28	24	86	4	14
Default settings	2	24	18	75	6	25
Total nr. of questions about Phase 1: Availability of data		96	64	67	32	33

Table 5-9: Overview of answers regarding fact-finding phase 1.

The facts are:

1. In the questionnaires an average of 33% of the responses on the subject of availability of data are non-identical answers.
2. A majority of the risks are transferred to an insurer.
3. Interest rate immunization is established by a cash flow matching of 90% for five years.
4. On July 1, 2008 the decision-making process of participating organization # 1 regarding the coverage ratio is not organized in such a way that the information necessary to calculate the coverage ratio is available.

5. No contractual arrangements were made to deliver the necessary information.
6. The different committees required by pension governance rules are established, but not fully in operation as prescribed by the objectives of the pension fund governance rules.
7. No default settings are established nor are checklists used.

The answers in the questionnaires, agendas, minutes of board meetings and interviews show whether the fund fulfilled its legal obligations for controlled and sound operations as well as internal agreements about preparation of meetings or decisions and risk management. If the board fulfilled its obligations it was able to respond. The answers showed that the fund is not doing what it is supposed to do because the information about the coverage ratio or to calculate it is not available. A coverage ratio based on available or distributed facts could not be calculated nor checked by each individual board member because the information was not available. Taking the AS IS information into account it must be concluded that the board was not able to respond because the appropriate information was lacking. This was due to faulty governance, because the board had no insight into the actual operation of the organisation – which, of course, they should have had.

5.1.3 Phase 2: Awareness

In the second phase of the conceptual research model, the question is whether the board was aware that something was happening that formed an exceptional risk for the coverage ratio and that they were adaptive to it. Based upon the previous phase of the conceptual research model and the TO BE situation based on information found in the documents, a clear view on the actual situation should be available. This is not the case given the lack of the required information to calculate the coverage ratio. That the information is not available is due to the lack of clarity in the contractual arrangements made with the insurer and the asset manager. In this phase, three variables were researched to see if the actual situation was recognized as a problem.

5.1.3.1 Actual Situation

Keeping in mind that phase 1 was completed with incomplete information the question remains: did the board continue the decision-making process? The answer is yes, although the available information was not complete. One may also wonder if the board developed that idea based on the actual situation or if there were personal views involved. The interview showed that one of the respondents kept its own (shadow) administration. The only variable discussed is who is responsible for putting the subject on the agenda of the different decision-making bodies.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Actual situation	2	2				
Total nr. of questions		4	0	0	4	100

Table 5-10: Overview of answers regarding fact-finding actual situation.

One respondent answered that the subject of the coverage ratio was placed on the agenda according to the standards of the Investment Advisory Committee. The other respondent answered that the manager of the pension fund placed the subject on the agenda. In the previous phase of the conceptual model it is established that:

1. There is an Investment Advisory Committee.
2. The governing rules are not entirely implemented yet.

As mentioned, the regulations concerning decision-making did not exist yet according to the minutes of the board (Participating organization # 1, 2008h). In the AOM it is recorded that the Executive Committee shall prepare and implement board decisions. The Executive Committee consists of a secretary, an employee member, the manager and the administrator of the pension fund. The manager is the chairman of the Executive Committee. This is a reason to see the decision as ascribable to the initiative of the Executive Committee.

To summarize the facts of the first variable of phase 2:

1. In the questionnaires 100% of the responses on the subject of the actual situation are non-identical answers.
2. Due to the decision of the executive board, the subject coverage ratio was put on the agenda of the board.

The fact that 100% of the answers are not identical is not that important. It is a relative number for only two questions. Secondly, it is possible that only one respondent knew the proper procedure while he was in charge, as a member of the executive committee. However, it is important that all board members know the proper procedure in the event that one member may be ill or otherwise not available.

5.1.3.2 Context

The second variable in the second phase of the research model is context. Six questions with a yes or no answer are raised about the illusion of control and time pressure. With these questions a view on biases in the decision-making process about the coverage ratio are established.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Context	2	6				
Total nr. of questions		12	8	67	4	33

Table 5-11: Overview of answers regarding fact-finding context.

The questions, which were answered differently, are:

1. Nothing can happen to us.
2. All risks are covered or hedged.

These answers show that there was doubt among those answering the questionnaire about what was happening. In short there are biases, which could

have an impact on the next variable, which is problem recognition. During the second meeting with the interviewee he said that the equity risk was not hedged. Therefore the answer given by him in the questionnaire was not correct. This changes Table 5-12 as follows:

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Context	2	6				
Total nr. of questions		12	10	83	2	17

Table 5-12: Overview of answers regarding fact-finding context.

5.1.3.3 Problem Recognition

Three questions with a yes or no answer were raised about the recognition of the problem. With these questions, a view on the impact of the biases in the decision-making process about the coverage ratio was established.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Problem recognition	2	3				
Total nr. of questions		6	2	33	4	67

Table 5-13: Overview of answers regarding fact-finding problem recognition.

The questions, which are answered differently, are:

1. Was the subject coverage ratio recognized as a problem?
2. Was the problem recognition a joint position?

The answers show that the subject could or could not be placed on the agenda. During the research period the received agenda and minutes of the meetings show that the subject coverage ratio was an item during the board meetings. As an addition to the gathered information through desk research and questionnaires the spokesman of the board explained during the second

meeting on March 9, 2012, that in 2006 the contract with the financial sponsor had been changed. The pension fund received in amending the contract a “dowry” in the form of a commitment that the fund only after 5 years itself had to take care of the financing of the indexation. Since the nominal pension entitlements are assured, the topic coverage ratio never has been a topic of conversation during the board meetings since 2006. The revised financing agreement that was developed after the financial crisis in 2008 caused the board of the pension fund to pay more attention to the development of the return portfolio.

A summary of the facts and results of the questionnaires can lead to a conclusion concerning the second phase of the decision-making process, in which three variables of the availability of information are researched. The overview is shown in Table 5-14.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Actual situation	2	4	0	0	4	100
Context	2	12	10	83	2	17
Problem recognition	2	6	2	33	4	67
Total nr. of questions about Phase 2: Awareness		22	12	55	10	45

Table 5-14: Overview of answers regarding fact-finding phase 2.

The facts are:

1. In the questionnaires 45% of the responses on the subject of awareness are non- identical answers.
2. The actual situation was not recognized as such, because the information about the coverage ratio was not available.
3. Biases (nothing can happen to us) are part of this phase considering the recognition of the problem because one respondent answered that the subject coverage ratio was not recognized as a problem.

Even though 45% of the answers are not identical and not vital for the decision-making process, attention should be given to this fact. It is not vital because looking at the agendas it is obvious that the subject was a discussion point during board meetings. However, attention should be given because the board as a whole is responsible. This means, according to pension fund governance principles, that board members should be open - to participants, but also to each other. This requires a behaviour which probably is not currently present.

On this premise the answers in the questionnaires, agendas, minutes of board meetings and interviews show whether the fund fulfilled its obligations. The obligations are the organization of controlled and sound operations, outsourcing, business processes and business risks management and the internal agreements about risk management and preparing meetings or decisions. The answer to the question if the fund fulfilled its obligations shows if the board was adaptive to the situation. It seems that despite the fact that the board lacked concrete information of the assets and the liabilities it was adaptive to the situation, as ascertained from minutes of the board meetings. Various board reports seem to imply that this was based on personal views or obligations as laid down in law and internal documents.

5.1.4 Phase 3: Analysis

The third phase of the conceptual research model revolves around the question how the analysis of these subjects takes place. Six questions research two variables of the subject. The first variable is meeting preparation.

5.1.4.1 Meeting Preparation

There is unanimity in the responses provided by two board members which is shown in the following Table 5-15:

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Meeting preparation	2	3				
Total nr. of questions		6	6	100	0	0

Table 5-15: Overview of answers regarding fact-finding meeting preparation.

The answers are:

Yes, the manager in co-operation with the chairman set the goal for the meeting.

Yes, meetings have a predetermined goal.

Yes, there are alternatives developed in preparation for the meeting.

In terms of preparation of the meeting, every board member has the ability to be aware of what is going to be discussed. They also can inform properly themselves properly in advance by reading and evaluating the prepared meeting documents.

5.1.4.2 Meeting

There is less unanimity in the answers regarding the meeting, which is shown in the following Table 5-16:

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Meeting	2	3				
Total nr. of questions		6	2	33	4	67

Table 5-16: Overview of answers regarding fact-finding meeting.

The only question, which was answered unanimously, is: are the choices explained? The answer is yes.

The questions, which are answered differently, are:

1. Are goals set per subject?
2. Did this happen during the research period regarding the coverage ratio?

The reason for this can be found in the answer that the subject coverage ratio was not an agenda subject for the board meetings during the research period.

By summarizing the facts and the questionnaires, a conclusion can be reached concerning the third phase of the decision-making process, which entails the analysis of the research of the two variables as shown in Table 5-17.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Meeting preparation	2	6	6	100	0	0
Meeting	2	6	2	33	4	67
Total nr. of questions about Phase 3: Analysis		12	8	67	4	33

Table 5-17: Overview of answers regarding fact-finding phase 3.

The facts are:

1. In the questionnaires 33% of the responses on the subject of analysis are non- identical answers.
2. The setup of the meetings is carried out accordingly to the internal rules.

The fact that 33 percent of the answers are non identical are not vital for the discussion of the subject. However, as mentioned before it should get attention of the board.

In the Analysis phase two variables were examined: meeting preparation and meeting. The answers to the questions raised shows - whether the board was ready to respond based on confirmed information. The meetings were properly prepared and organized as they should be. Therefore, it was possible to properly discuss the subject of the coverage ratio. However, due to the biases involved and the lack of correct information (see the description of the previous

phases) it is feasible that the discussion, which took place before the decision, was inefficient and ineffective and the board was not ready to respond. During the second meeting of March 9, 2012 it became clear that the lack of concrete information was not regarded as desirable. This was the trigger for the board to work towards a more far-reaching professionalization of the process of decision-making. In this phase of the process it can be concluded that the board have learned from the past. The result is the customization of the service level agreements with the asset manager and the insurer. In 2011 the changes herein relate inter alia to the content and timing of the information flow.

5.1.5 Phase 4: Action

In the fourth and last phase of the conceptual research model the question is how the action is conducted and how the entire decision-making process about the coverage ratio is evaluated. Two variables cover this. The first variable is decision.

5.1.5.1 Decision

Five questions with a yes or no answer are raised about the action called the decision. With these questions a view on the impact of the biases in the decision-making process about the coverage ratio is established. An overview of the answers given in the questionnaires is shown in Table 5-18.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Decision	2	8				
Total nr. of questions		16	12	75	4	25

Table 5-18: Overview of answers regarding fact-finding decision.

There is uniformity in answers that the decisions are in writing. This is proven by the minutes of the different meetings. However, there is disagreement whether

the decision is up to those who report on the progress. The minutes of the meetings show that decisions are recorded without mentioning who is responsible for conducting the control of the decision. In the memo²⁵ to the board (Participating organization # 1, 2010a) it is recorded that one of the recommendations of the Review Committee relates to the decision-making process of the board in the development of policy. As a follow-up to this recommendation of the Review Committee, the board has decided to:

1. To record more specifically the decisions in the minutes of board meetings (this happens from July 1, 2010).
2. In meeting documentation, when a decision is required to include a template with the following information for each decision:
 - a. Decision.
 - b. Reasons for the decision.
 - c. Implications for employer, participants, former participants, retirees, Actuarial and Technical Business Report and other legal documents.
 - d. Communication.
 - e. Whether or not advice of the council of members is required.
3. Setting up a decisions registry.

In improving the decision registry and designing a template mentioned in number 2 above the issue of RISKS is missing. In the phase of the action when the decision is at stake the question is: Are decisions taken regarding the coverage ratio? The answer is YES. The mandate of the asset manager is discussed several times, due to the changes, which as a result of the meetings of the Investment Advisory Committee, were proposed to the board. However, nothing was changed, because the board has decided “no derogation”. The decision was explicitly taken not to change the strategic investment policy. The interview shows that the board was convinced that the re-insurance of the risks and hedging the interest rate risk for 90% were the two components that

²⁵ Translated by researcher: “ From reports is not always obvious when a decision is taken and what considerations have underpinned the decision. It is recommended to lay down clearly in reports when a decision is taken and what considerations underlie the decision. Decisions derogating from the Actuarial and Technical Business Report and financing agreement hereby ask special attention.” PARTICIPATING ORGANIZATION # 1 (2010a) Memo to the board. Amsterdam.

gave the board the confidence not to depart from the strategic investment policy. The issue of coverage ratio triggered other decisions as well. Decisions were made about the responsibilities of the Investment Advisory Committee and the required content of the reports of the asset manager.

5.1.5.2 Evaluation

Twelve questions with either yes or no as possible answers were raised about the evaluation of the entire decision-making process regarding the subject of the coverage ratio. The questions give a picture of the lessons learned and any change to which these questions have led. The results of the answers are shown in the following Table 5-19.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Evaluation	2	12				
Total nr. of questions		24	16	67	8	33

Table 5-19: Overview of answers regarding fact-finding decision.

The facts are:

1. In the questionnaires 33% of the responses on the subject of evaluation are non-identical answers.
2. One of these non-identical answers concerned the question whether any lessons were learned.
3. When the question of whether there were lessons learned is answered ambiguously, it is impossible to determine whether changes since then emerge from the decision-making process around the coverage ratio or otherwise.

The non-identical answers are not vital for the process of decision-making. By summarizing the facts and results of the questionnaires, a conclusion can be drawn concerning the fourth phase of the decision-making process, in which the

two variables of the action are researched. The overview is shown in Table 5-20.

SUBJECT	Respondents	Number of questions	Identical answers	% Identical answers	Non-identical answers	% Non-identical answers
Decision	2	16	12	75	4	25
Evaluation	2	24	16	67	8	33
Total nr. of questions about Phase 4: Action		40	28	70	12	30

Table 5-20: Overview of answers regarding fact-finding phase 4.

The available information does not show who is responsible for the implementation or control of the decision. It seems as if personal involvement is the basis on which the decision-making and the implementation is based. On this premise the answer shows whether the board takes action or not. On the basis of the AS IS situation found in the organization, an opinion can be justified concerning the quality of the decision-making process. It is known that the board was not in control. There was room for improvement of the quality of the process. The situation of not being in control has triggered a process of improvement.

5.1.6 Comparison of TO BE and AS IS Process of Decision-Making

There are two TO BE situations. The first one has to do with the legal requirements and its translation in internal documents. Whether the organization was prepared to act during a crisis situation can be tested against the measures, procedures and rules that are available and accessible. The actual implementation indicates the importance that the fund attaches thereto. The implementation can also be considered as lessons learned from the past. The following table shows the TO BE and AS IS situation of the fundament of the processes.

Basis	TO BE based on law and regulation	AS IS	Pension fund governance function
IOPS regulation & pension fund governance rules	Mission, vision, strategy	Not available	Careful Management
IOPS regulation & pension fund governance rules	Description of decision-making process	Not available	Careful Management
33 Pension Act: Controlled and sound operations.	A clear and adequate organisational structure.	An organization chart is available.	Careful Management & Openness
33 Pension Act: Controlled and sound operations.	A description of responsibilities of the board (members).	A short description of some responsibilities can be found in the internal control rules.	Careful Management, Accountability & Expertise

Table 5-21: Overview of fundament of decision-making processes.

5.1.6.1 Comparison TO BE and AS IS Phase 1: Availability of Data

Considering the phase of availability of data a clear and adequate division of roles and responsibilities should be organized. Appointments for receiving information considering assets, liabilities and developments are set out in the internal control rules and AOM. From the process perspective, the following differences analysis is drafted. For phase 1: Availability of data the following is established. One should consider that the following pension fund governance functions are involved: careful management, accountability, internal supervision, expertise and openness.

TO BE process	AS IS process
<ol style="list-style-type: none"> 1. The board receives a monthly asset management report. 2. The board receives the valuation at market value of the coverage ratio and the actual value of the assets. 3. Every three months the asset manager sends the board a report with a reflection on past developments, and a prediction of future developments in the investment markets 	<ol style="list-style-type: none"> 1. Vague verbally agreements are made with asset manager. 2. No written contractual arrangements were made with the insurer. 3. The report is sent.

TO BE process Cont'd	AS IS process Cont'd
4. The board receives a quarterly report on implementation of the pension scheme by the re-insurer	4. With the insurer that registers the liabilities nothing is agreed about the information delivery. A board member keeps on personal title a shadow administration out of personal interest. This is not shared with other board members
5. The Executive Committee makes and disseminates within the board a report covering relevant developments in the pension field and possible implications for the fund.	5. No relevant developments were signalled.
6. The Investment Advisory Committee (IAC) discusses, once every three months with the advisors of the board the results of the investments versus that of the benchmark.	6. Considering the minutes of the IAC this is performed.

Table 5-22: Comparison TO BE versus AS IS phase 1.

5.1.6.2 Comparison TO BE and AS IS Phase 2: Awareness

One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise and openness. From the process perspective, the following differences analysis is drafted.

TO BE process	AS IS process
1. After the consultation and discussion the IAC takes a decision whether a decision of the board is required.	1. Distribution of information is done verbally during the meeting of the IAC.
2. The manager in consultation with the Executive Committee sets up the agenda of the board meeting	2. In September the asset manager asked the IAC to adjust the investment mandate due to market developments. He assesses the situation as not required or even dangerous. The process is conducted as should be.
	3. The manager in consultation with the Executive Committee sets up the agenda of the board meeting.

Table 5-23: Comparison TO BE versus AS IS phase 2.

5.1.6.3 Comparison TO BE and AS IS Phase 3: Analysis

One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise and openness. From the process perspective, the following differences analysis is drafted.

TO BE process	AS IS process
1. The agenda together with the gathered information is sent to the board members one week in advance of the meeting.	1. The process is conducted as should be. 2. In September the asset manager asked the IAC to adjust the investment mandate due to market developments. He assesses the situation as not required or even dangerous. The process is conducted as should be. The IAC submitted this statement without alternatives to the board. It is unknown whether this was in writing.

Table 5-24 Comparison TO BE versus AS IS Phase 3.

5.1.6.4 Comparison TO BE and AS IS Phase 4: Action

One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise, openness, and communication. From the process perspective, the following differences analysis is drafted.

TO BE process	AS IS process
1. The board decides on the advice of the IAC.	1. The assessment of the investments and the full preparation for decision-making by the board considering the subject of the coverage ratio is in the hands of the IAC. 2. The request of the asset manager to adjust the investment mandate was rejected by the board because the interest risk was hedged for the most part. However, the board did not know whether this was enough.

TO BE process Cont'd	AS IS process Cont'd
2.	3. The assessment of the investments and the full preparation for decision-making by the board considering the subject of the coverage ratio is in the hands of the IAC

Table 5-25: Comparison TO BE versus AS IS Phase 4.

5.2 Empirical Data of Participating Organization # 2

The participating organization number two (# 2) has some specific characteristics. It differs from the first case not only in terms of design, number of participants, assets and liabilities, but also with regard to the sponsoring organization. The sponsoring organization went bankrupt on July 28, 2008. Therefore, participating organization # 2 was not only occupied with the changing financial market conditions but also with the consequences of the bankruptcy of its sponsor(ing company). This has influenced the decision-making process about the coverage ratio during the research period. One of the consequences of bankruptcy of the sponsoring party is that the traditional instrument of the premium (increase) can no longer be used as an instrument to absorb the risks of the fund. It is therefore important to determine whether there was a decrease of coverage ratio, which required action, and if so, which action was taken. Being in control is therefore a major topic for the participating organization. Control in this situation means: Are we prudentially taking care of the money to pay the pension entitlements? A brief outline of the participating organization is included in the following section.

5.2.1 Outline of Participating Organization # 2

The following outline is based on four documents (Participating organization # 2, 2007, 2008d, 2008h, 2009b).

Facts company pension fund # 2	Year 2008	Year 2009
(former) participants		
Participants	338	201
Former participants	181	287
Beneficiaries	4	12
TOTAL	523	500

Facts company pension fund # 2 cont'd	Year 2008	Year 2009
Coverage ratio		
Valuation at market value of liabilities	€ 60,526,000	€ 57,442,000
Assets ²⁶	€ 60,419,000	€ 62,347,000
Coverage ratio according to annual report ²⁷	101.7%	107.7%
Board		
General management board	5 members	4 members
Representation of employer	3 members	2 members
Representation of employees	2 members	2 members
Representation of beneficiaries	0 members	0 members
Organization		
Executive Committee	Yes	Yes
Manager/director	0	0
Investment Advisory Committee	No	No
Supervisory board	No	No
Accountability body	Yes	Yes
Complaints Committee	No	No
Review Committee	Yes	Yes
Members' council	No	No
Facts company pension fund # 2 cont'd	Year 2008	Year 2009
External service providers		
Accountant	Yes	Yes
Actuary	Yes	Yes
Asset manager	Yes	Yes
Administration	Yes	Yes
Government body	Yes	Yes
Re-insurance (only disability claims type B 2 see section 1.3.1)	Yes	Yes

Table 5-26: Outline of participating organization # 2.

Looking at the participating organization # 2 and Table 5-26, it must be concluded that not all of the bodies required by pension fund governance were

²⁶ The strategic investment portfolio consisted of a matching and a return portfolio. The matching portfolio was designed to hedge the interest rate risk for 65% by using fixed income securities. The return portfolio was 35% of the assets and consisted of shares and funds.

²⁷ The calculation of the coverage ratio shows a different percentage than listed in the table and the annual report. Using the figures from the table the coverage ratio for 2008 is 99.82% and for 2009 108.53%. The reason for this lies in the interpretation of the rule for the drafting of the annual report. In 2008 and 2009 an endowment for implementation costs for future years is included.

implemented. The Members' council agreed to stop, due to the bankruptcy of the sponsoring organization (Participating organization # 2, 2008e). The Supervisory board and the Complaints Committee were not installed. The Members' council is in agreement with the participants, after the bankruptcy of the sponsoring organization, eliminated in December 2008 (Participating organization # 2, 2008f, 2010d). In terms of pension fund governance a pension fund board can decide to install a permanent Supervisory board or an Accountability body. The participating organization had chosen to install an Accountability body. To gain better insight into, and to conduct data triangulation about, the decision-making process concerning coverage ratios in the studied organization the following documents were used during the desk research phase:

- Organization chart (Participating organization # 2, 2008h).
- Two annual reports 2008 and 2009 (Participating organization # 2, 2008d, 2009b).
- Actuarial and Operating Memorandum (Participating organization # 2, 2007).
- Four agendas of pension fund board meetings (Participating organization # 2, 2008a, 2008b, 2008c, 2009a).
- Four minutes of pension fund board meetings (Participating organization # 2, 2008e, 2008f, 2008g, 2009e).
- Two coverage ratio monitors made up by the consultant (Participating organization # 2, 2009c, 2010a).
- Minutes of the consultation between the pension fund board and Accountability body (Participating organization # 2, 2009d).
- Report of the Review Committee (Participating organization # 2, 2010d).
- Memo about the liquidation of the participating organization (Participating organization # 2, 2010b).

Besides the aforementioned documents three members of the board completed a questionnaire (Participating organization # 2, 2011a, 2011b, 2011c). Due to the bankruptcy of the sponsoring company de facto three board members remained, although the annual reports for 2008 and 2009 mention four members. Documents containing the Mission, Vision and Strategy and the

decision-making process(es) were missing. To check and verify the findings one interview was conducted (Participating organization # 2, 2012). This took place on March 8, 2012. Although the interviewee did not reject the use of a digital voice recorder no recordings were made due to a technical fault of the voice recorder. The microphone was broken. To overcome the damage, abbreviated minutes (Participating organization # 2, 2012) were then drawn up and forwarded to the interviewee for authentication. He agreed with the content of the abbreviated minutes.

The following sections will provide more in-depth information about the AS IS situation.

5.2.2 Phase 1: Availability of Data

In this phase it was researched whether the data necessary for the decision-making process about the coverage ratio was available. Minutes of the board meeting (Participating organization # 2, 2008g) prior to the research period were made available by the participating organization. In these minutes one can read that five financial issues were discussed.

1. The minutes indicated that in the annual report of 2007 a difference of approximately two million euros should be explained before finalizing the year report. The external consultant offered apologies. However no specific decisions were reported in the minutes on action(s) to be performed to prevent recurrence.
2. Another interesting issue is the sub prime crisis, which caused the uncertainty on the financial markets to increase. The impact on the asset portfolio, however, was not so huge that it should be explained in the financial statement.
3. The certifying actuary stressed the importance of an alignment between the risks hedging in the investment and the actual insurance liabilities with associated duration. He argues that this topic played a role at numerous pension funds this year (2008).
4. One of the board members pointed out that in the report to the supervisor on the Q1 2008 a higher coverage ratio was calculated and reported than the

coverage ratio that followed from the figures of the external consultant. One of the participants of the meeting answered that the figures of the external consultant contained a mistake.

5. It was discussed that an adjustment of the investment policy should be considered. It was decided that 10 percent of the return portfolio should be invested in emerging markets.

Taking the previous minutes into account in which 2 million euros worth of errors, the sub prime crisis, the duration, a mistake in the report to the supervisor and the consideration to change the strategic investment policy are pointers for the board that something was happening and they were not informed before the meeting and therefore not in control. A pension fund, which has transferred only a part of the pension entitlement to an insurer, should prudentially take care of the money. Control in this situation means: are we taking care of the money to pay the pension entitlements or promised indexation in a prudent manner? To execute this the board should have all the required information available so it can decide whether they take care of the money prudently. Taking the previous minutes into account, the board should have been informed about these issues earlier. In the AOM (Participating organization # 2, 2007) it is recorded that the service provider will comply with the policy rule regarding outsourcing (Pensioen- & Verzekeringskamer, 2004, Minister van Sociale Zaken en Werkgelegenheid, 2006c) It can be established at this stage already, that

1. Agreed rules and regulations to be informed are established.
2. No information is exchanged between service provider and board prior to the board meeting.
3. Apologies during the meeting (Participating organization # 2, 2008g) are enough for the board to continue with the service providers without giving a signal or sanction.

Based on this knowledge, the topic of focus is: did the board take action to prevent recurrence? If they did, it should be recorded in the minutes of the meeting and visible in the gathered data concerning the first research phase.

The next sections will provide insight into the fact-findings of this stage of the conceptual model.

5.2.2.1 Information about Coverage Ratio

As mentioned before, three questionnaires were returned. One of them did not provide the answers to the questions about figures of the coverage ratio. It was added that this information was known, but the respondent would need to search for it, which he was not willing to do. In documentation (Participating organization # 2, 2007) one can find the TO BE situation about the process and information exchange, which is:

1. The board determines the investment policy. It is assumed to be a strategic asset mix of 65% fixed income and 35% business values.
2. Administrative reports are periodically provided to the board.
3. The service provider delivers a quarterly investment report that meets the requirements of the supervisor.
4. The developments resulting from b. and c. will be presented together with periodic coverage ratio reports.

The described TO BE situation corresponds with the TO BE situation of the conceptual research model. The AS IS situation is determined by the questionnaires and the interview. Starting with the information about the assets the following is established (see Table 5-27):

Location	Assets July 1, 2008	Assets Oct. 1, 2008	Assets Jan. 1, 2009	Assets April 1, 2009
Respondent 1	€ 58,678,000	€ 57,487,000	€ 60,094,000	€ 56,788,000
Respondent 2	€ 55,359,000	€ 56,749,000	€ 61,235,000	€ 57,768,000
Annual report 2008	Not reported	Not reported	€ 61,676,000	
Annual report 2009			Not reported	Not reported
Deviation between highest and lowest reported number	€ 3,319,000 5.99%	€ 738,000 1.30%	€ 1,582,000 2.63%	€ 980,000 1.73%

Table 5-27: Fact-finding about assets.

The annual report includes only the amount of assets at December 31st of any year. As an addition to the provided answers about the value of the assets, one of the respondents replied that the asset manager prescribed the amounts mentioned above. The amounts listed on the report to the supervisor are different. The respondent recorded the differences in an excel sheet (Participating organization # 2, 2009f). It is unknown what the real figures are. This was also earlier the case according to the minutes of the board meeting of June 7, 2008. The administration of the liabilities administration was outsourced to a service provider. For the calculation of the coverage ratio it is necessary to know the value of the liabilities. The questionnaires and the year report of 2008 show the following information about the liabilities (see Table 5-28):

Location	Liabilities July 1, 2008	Liabilities Oct. 1, 2008	Liabilities Jan. 1, 2009	Liabilities April 1, 2009
Respondent 1	€ 46,220,000	€ 49,620,000	€ 59,330,000	€ 58,850,000
Respondent 2	€ 45,681,000	€ 49,348,000	€ 59,330,000	€ 59,970,000
Annual report 2008	Not reported	Not reported	€ 60,526,000	
Annual report 2009			Not reported	Not reported
Deviation between highest and lowest reported number	€ 539,000 1.18%	€ 272,000 0.55%	€ 1,196,000 2.02%	€ 1,120,000 1.90%

Table 5-28: Fact-finding about liabilities.

The annual report includes only the amount of liabilities at December 31st of any year. Looking at the coverage ratio it is no longer surprising that, once again, the respondents provide different information, as is shown in the following Table 5-29:

Location	Coverage ratio July 1, 2008	Coverage ratio Oct. 1, 2008	Coverage ratio Jan. 1, 2009	Coverage ratio April 1, 2009
Respondent 1	127%	116%	101.3%	96.5%
Respondent 2	121.2%	113.9%	101.5%	96.3%
Annual report 2008	Not reported	Not reported	101.7%	
Annual report 2009				Not reported

Table 5-29: Fact-finding about coverage ratio.

The annual report includes only the coverage ratio at December 31st of any year. An overview of the given answers is shown in Table 5-30.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Assets	2	5				
Total nr. of questions		10	0	0	10	100
Liabilities	2	5				
Total nr. of questions		10	4	40	6	60
Coverage ratio	2	4				
Total nr. of questions		8	0	0	8	100
Other	3	8				
Total nr. of questions		24	17	71	7	29
TOTAL		52	21	40	31	60

Table 5-30: Overview of answers regarding fact-finding coverage ratio.

To summarize the answers of the questionnaires about the fact-finding stage of the variable of the coverage ratio, the following can be stated:

The participating organization # 2 has chosen to divide the strategic investment portfolio in two parts: one to cover the interest risk, which is the matching portfolio, and one called the return portfolio which includes only shares and funds. The matching portfolio was designed to hedge the interest rate risk for 65%. The matching risk is the difference between the duration of pension liabilities and the duration of assets. The board chose for government bonds²⁸. The return portfolio covering 35% of the liabilities was set up to make profit with the rest of the assets. This can be achieved if investment markets pick up again and show that there are higher yields, which can be achieved. The results of this assets portfolio can then contribute to the required cash flow matching of 100% and with a possible surplus to the objective of the pension fund, to provide an indexation grant for the increased cost of living. This objective is in

²⁸ Translated by researcher: "However, the interest, which the supervisor is required to calculate for the pension obligation is based on the SWAP yield curve and this is during the research period below that of government bonds. As a result the liabilities increased more than the value of the matching portfolio. The consequence is that the coverage ratio decreased." PARTICIPATING ORGANIZATION # 2 (2009d) Minutes of consultation between the pension fund board and accountability body. Arnhem.

fact aimed at preserving purchasing power. Due to a decrease of stock value and interest rate the coverage ratio decreased which, taking into consideration the minutes of the board meeting of June 7, 2008, should be known.

The sponsoring organization went bankrupt on July 28, 2008. This event has consequences of a different nature for the pension fund. In the board meeting of September 16, 2008 (Participating organization # 2, 2008f) several options of how to continue were discussed. The considerations for the fund itself:

1. The fund can decide to move directly to an insured scheme.
2. Join the industry-wide pension scheme.
3. Continue as independent pension fund.

Another consequence mentioned before is that the traditional instrument of the premium (increase) can no longer be used as an instrument to absorb the risks of the fund. Then there are legal issues, such as who is considered to be a participant. At that time there was a vacancy for the position of compliance officer. The board decided to ask a member of the accountability body to fulfil this task. Finally a discussion took place about when it is reasonable to declare bankruptcy in response to the level of risk the investment policy. It is assumed that the investment horizon has become significantly shorter. How much shorter, however, is not clear yet. The board decided not to execute the decision in the previous board meeting to invest 10% of the return portfolio in emerging markets. The board also decided not to change the strategic investment policy. One can read in the minutes of the board meeting of December 9, 2008 (Participating organization # 2, 2008e) that no major decisions will be taken and the investment policy will be maintained temporarily. The investment policy for 2009 will be discussed at the beginning of 2009. To summarize the facts of the first variable of phase 1 - information about the coverage ratio - the following is established:

1. During the board meeting before the start of the research period, five financial issues were discussed, i.e. errors in the reports and financial dangers. However, it is not recorded in the minutes that measures were taken to prevent mistakes in the future.
2. In the questionnaires 60% of the responses on the information about coverage ratio are non-identical, although in the AOM and internal control

rules the TO BE situation is described. It is described what the board would receive in terms of information reports, so there would be no difference within the board about the investments, the liabilities, and the coverage ratio. The interview showed that the reports are received in a different frequency. The service provider did not provide the reports in a frequency as described in the AOM.

3. The board had chosen for hedging the interest risk by a matching portfolio to a size of 65%.
4. The set-up of the matching portfolio did not cover the interest risk as required.

An explanation was given during the interview²⁹ on how the questionnaires can show an actual coverage ratio, which is different from the reported one.

The fact that 60% of the given answers are non-identical is a worrying fact. The board members should have the same information available. By means of data triangulation the correct numbers are checked in the year reports. Without correct information no decisions could have been taken at all. Yet, the process of decision-making went on.

5.2.2.2 Pension Fund Governance Principles

The second variable in the first phase of the research model is pension fund governance. The question, which should be answered, is whether the fund has implemented the required proper governance measures, and if so, if the participating organization # 2 has complied to the rules of pension fund governance. Based on the Decree on the Implementation of the Pension Act, the following committees should have been installed: Accountability body or Supervisory board, Review Committee, Complaints Committee and Members' council. Hereafter, the facts concerning the participation of different

²⁹ Translated by researcher: "One of the board members set up an administration for his own purpose. He used data from that Excel sheet. The board sometimes received the reports with financial information as agreed in the AOM, but that was always afterwards and never timely." PARTICIPATING ORGANIZATION # 2 (2012) Abbreviated minutes of meeting with the chairman of the board. Duiven.

committees in the decision-making process about the coverage ratio are discussed. The minutes of the various (board) meetings show that: There were only two meetings (Participating organization # 2, 2009d, 2010c) with the Accountability body. Both dates are beyond the research period. The Accountability body was only informed about the situation during the meetings.

1. There is only one report from the Review Committee (Participating organization # 2, 2010d).

An overview of the results of the questionnaires about the fact-finding stage of the coverage ratio is shown in Table 5-31.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Pension fund governance	3	14				
Total nr. of questions		42	35	83	7	17

Table 5-31: Overview of answers regarding fact-finding pension fund governance.

To summarize, the facts of the second variable of phase 1, which is pension fund governance, are as follows:

1. In the questionnaires, 17% of the responses on the information about pension fund governance are non-identical answers.
2. Not all the different bodies required by the governmental rules concerning pension funds were established.
3. The rules have not been put into operation in the desired size yet, so that the goals of pension fund governance have not been reached.

Fact # 2 shows that there is a difference between the legally required TO BE situation and the pension fund specific implementation.

5.2.2.3 Default Settings

Neither default settings, nor references to them were found in the various examined documents. In the questionnaires, questions about different default

settings were raised as to whether default settings exist in practice. During the interview it was mentioned that internal rules of procedure described the frequency of meetings and the different quorum. The questionnaires showed that no checklists are used. An overview of the results of the questionnaires about the fact-finding stage of the default settings is shown in Table 5-32.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Default settings	3	12				
Total nr. of questions		36	32	89	4	11

Table 5-32: Overview of answers regarding fact-finding default settings.

A summary of the facts of the 3rd variable of phase 1:

1. In the questionnaires, 11% of the responses on the subject default settings are non-identical answers.
2. No checklists are used regarding the decision-making process.

An overview of the gathered responses considering phase 1 of the conceptual research model is shown in Table 5-33.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Information about coverage ratio	3	52	21	40	31	60
Pension fund governance rules	3	42	35	83	7	17
Default settings	3	36	32	89	4	11
Total nr. of questions about Phase 1: Availability of data		130	88	67	42	32

Table 5-33: Overview of answers regarding fact-finding phase 1.

Summarizing the facts and the results of the questionnaires forms the basis for the conclusion for the first phase of the decision-making process, in which three variables of the availability of data are researched. The facts are:

During the board meeting before the start of the research period, five financial issues were discussed. Summarized, the issues had to do with errors in the reports and financial dangers. However, it is not recorded in the minutes that measures were taken to prevent mistakes in the future.

1. It is established on the basis of the minutes of the board meeting (Participating organization # 2, 2008g) that the board was not in control on the June 17, 2008.
2. In the questionnaires 32% of the responses on the subject of availability of data are non-identical answers.
3. Interest rate immunization should be established by a minimum cash flow matching of 65%. However due to the duration this was not the case as mentioned by the accountant during the meeting of the June 17, 2008.
4. On July 1, 2008 the decision-making process of participating organization # 2 regarding the coverage ratio is organized on paper in such a way (Participating organization # 2, 2007) that the data necessary to calculate the coverage ratio could be available. However, due to the vague formulation of times when it will be available it is uncertain whether it is available when required.
5. At first the information necessary to calculate the coverage ratio was not available, and when it became available, it was not accurate.
6. Two bodies required by pension governance rules are established.
7. The rest of the mandatory committees and methods as prescribed by the objectives of the pension fund governance rules are not implemented.
8. No default settings are established nor are checklists used.

On this premise the answers in the questionnaires, agendas, minutes of board meetings and interview show whether the fund fulfilled its legal obligations for controlled and sound operations and to the internal agreements about preparing meetings or decisions and risk management. If the board fulfilled its obligations it was able to respond.

The answers showed that the fund is not doing what it is supposed to do because the information about the coverage ratio or to calculate it is not available. A coverage ratio based on available or distributed facts could not be calculated nor checked by each individual board member because the

information was not available. The information for continuing the decision-making process about the coverage ratio should be available but in practice it was not, and if available not correct. Taken the AS IS information into account it must be concluded that the board was not able to respond because the appropriate information was lacking. This was due to faulty governance, because the board had no insight into the actual operation of the organisation – which, of course, they should have had.

5.2.3 Phase 2: Awareness

In the second phase of the conceptual research model, the question is whether the board was aware that something was happening that formed an exceptional risk for the coverage ratio and that they were adaptive to it. Based upon the previous phase of the conceptual research model and the TO BE situation based on information found in the documents as described in section 5.2.1, a clear view on the actual situation should be available. This is not the case given the lack of the required information to calculate the coverage ratio. However, in practice it is not. That the data is not available is caused by a wait-and-see attitude of the service providers. No document examined showed that the board appealed to the service providers thereto.

In this phase, three variables were researched to see if the actual situation was recognized as a problem.

5.2.3.1 Actual Situation

Keeping in mind that phase 1 was completed with untimely and inaccurate information, the question remains if the board continued with the decision-making process although they were not in control. This was the case, although the available information was not correct. One may also wonder whether the board developed the idea that a decision was necessary based on the actual situation or whether there were personal views involved, and whose interests were served by this decision. The following Table 5-34 shows the answers given in the questionnaires.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Actual situation	3	2				
Total nr. of questions		6	2	33	4	67

Table 5-34: Overview of answers regarding fact-finding in the actual situation.

Two respondents answered that the subject of the coverage ratio was placed on the agenda by the board. The other board member answered that the chairman of the board placed the subject on the agenda. The internal control rules on this subject are inconclusive.

The other question was whether this was a consensual decision or an individual initiative. One respondent answered that it was a combination of both, the other respondent answered that it was the responsibility of the board and the third respondent answered that it was done with the support of all. These differing answers demonstrate that not all board members were aware of who was responsible for this decision, and so they did not take conscious responsibility.

To summarize the facts of the first variable of phase 2:

1. In the questionnaires 67% of the responses on the subject actual situation are non-identical answers.
2. It is unknown who put the subject coverage ratio on the agenda of the board.

Both facts are worrying, but not vital for the process. More openness could construct a change where every board member know what to do and why.

5.2.3.2 Context

The second variable in the second phase of the research model is context.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Context	3	6				
Total nr. of questions		18	18	100	0	0

Table 5-35: Overview of answers regarding fact-finding context.

Table 5-35 shows that all the answers are identical. This means that on the basis of the given answers no biases can be demonstrated. At least nobody admitted in writing that there was a bias involved.

5.2.3.3 Problem Recognition

The questionnaires show the following results:

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Problem recognition	3	3				
Total nr. of questions		9	9	100	0	0

Table 5-36: Overview of answers regarding fact-finding problem recognition.

In two situations the subject of the coverage ratio was discussed according to the agenda (Participating organization # 2, 2008a, 2009a). This complies with the given answers in the questionnaires. However, it is unknown who is responsible for putting the subject on the agenda. A summary of the facts and results of the questionnaires can lead to a conclusion concerning the second phase of the decision-making process, in which three variables of the awareness phase were researched.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Actual situation	3	6	2	33	4	67
Context	3	18	18	100	0	0
Problem recognition	3	9	9	100	0	0
Total nr. of questions about Phase 2: Awareness		33	29	87	4	12

Table 5-37: Overview of answers regarding fact-finding phase 2.

The facts are:

1. In the questionnaires 12% of the responses on the subject of awareness are non- identical answers.
2. All the board members did not know the exact and agreed process of the agenda setting.
3. The actual situation was recognized as such, but was not based on accurate information about the coverage ratio considering the numbers of the assets and liabilities.
4. The subject of the coverage ratio was on the agenda twice during the studied period.
5. It is not known who is responsible for putting the subject on the agenda.
6. The researched biases are not a part of the recognition of the problem.

On this premise the answers in the questionnaires, agendas, minutes of board meetings and interviews show whether the fund fulfilled its obligations. The obligations are the organization of controlled and sound operations, outsourcing, business processes and business risks management and the internal agreements about risk management and preparing meetings or decisions. The answer to the question if the fund fulfilled its obligations shows if the board was adaptive to the situation. Based on these facts, the following conclusion can be drawn: the data for continuing the decision-making process about the coverage ratio was not influenced due to personal biases, or incorrect information. However, the decision-making process was continued although no

correct data was available. This means that, despite the fact that the board lacked the concrete data of the assets and the liabilities it was adaptive to the situation, as ascertained from minutes of the board meetings.

5.2.4 Phase 3: Analysis

The third phase of the conceptual research model revolves around the question how the analysis of these subjects takes place. Six questions research two variables of the subject. The first variable is meeting preparation.

5.2.4.1 Meeting Preparation

There is unanimity in the responses provided by two board members, which is shown in the following Table 5-38.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Meeting preparation	3	3				
Total nr. of questions		9	7	78	2	22

Table 5-38: Overview of answers regarding fact-finding meeting preparation.

There was no fixed agenda or agenda items, but if a subject was placed on the agenda it was prepared in writing. This corresponds with the given answers in the questionnaires. This written preparation should also count for the subject of the coverage ratio. However, the coverage ratio came under the heading 'notices'. Usually, 'notices' are not prepared in advance, but are given during the meeting

5.2.4.2 Meeting

There is almost unanimity in the answers regarding the meeting, which is shown in the following 5-39.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Meeting	3	3				
Total nr. of questions		9	8	89	1	11

Table 5-39: Overview of answers regarding fact-finding meeting.

The only question, which was not unanimously answered, is: 'Are goals being set per subject during meetings?' The answers were yes, yes and sometimes. The following Table 5-40 provides an overview of all the given answers for this phase of the conceptual research model.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Meeting preparation	3	9	7	78	2	22
Meeting		9	8	89	1	11
Total nr. of questions about Phase 3: Analysis		18	15	83	3	17

Table 5-40: Overview of answers regarding fact-finding phase 3.

By summarizing the facts and the questionnaires, a conclusion can be reached concerning the third phase of the decision-making process, which entails the analysis of the research of the two variables.

The facts are:

1. In the questionnaires 17% of the responses on the subject of analysis are non- identical answers.
2. The setup of the meetings is not carried out as required and agreed in the internal control rules (Participating organization # 2, 2006).

Not all the subjects are prepared, analysed and distributed before the meeting. This certainly counts for the subject coverage ratio.

The answer to the raised questions provides the answer whether the board was ready to respond based on confirmed information. The board continued the decision-making process, even though they knew that the information was not correct, new information was available, and severe mistakes in different reports were discussed. During the interview (Participating organization # 2, 2012), the chairman told that due to the liquidation of the sponsoring organization the board was not only focussed on the subject of the coverage ratio, but on existing as a pension fund as well. Caused by the changing financial situation, having reliable and correct financial information is crucial. No document shows that the board has taken steps to have that information available. The chairman stated that the board relied on the expertise of the service providers and external consultants.

The conclusion for this phase of the conceptual research model is the following: the meetings were not prepared and organized, as they were supposed to be. Yet, two agendas carried the subject of the coverage ratio and the subject was discussed. Due to the lack of correct information (see the description of the previous phases) it is feasible that the discussion, which took place before the decision, was inefficient and ineffective. Therefore the board was willing but not ready to respond.

5.2.5 Phase 4: Action

In the fourth and final phase of the conceptual research model the question is how the action is conducted and how the entire decision-making process about the coverage ratio is evaluated. Two variables answer this question. The first variable is decision.

5.2.5.1 Decision

Five questions with a yes or no answer were raised about the action labelled 'decision'.

With these questions, a view on the control over the activities in the decision-making process about the coverage ratio is established. The other three questions are open. They speculate about the motivation of this process. The results of the given answers are shown in the following Table 5-41.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Decision	3	8				
Total nr. of questions		24	21	88	3	12

Table 5-41: Overview of answers regarding fact-finding decision

There is uniformity in answers that the decisions were written down. This is proven by the minutes of the different meetings. However, there is disagreement whether the decisions and correct information were communicated³⁰ to the beneficiaries. It seems as if beneficiaries are informed. It is also known and discussed during the previously mentioned meeting that, again, the information is at least doubtful and needs to be thoroughly investigated. In the previously mentioned minutes of the meeting one can find a part of a transcript of a discussion, which took place about a presentation of the asset manager. Again one of the slides of the asset manager shows a different coverage. It differs from the official report to the supervisor, the coverage monitor conducted by the other external advisor, and the information put in the newsletter to the beneficiaries. In that same meeting a discussion took place

³⁰ Translated by researcher: "The stated coverage in the newsletter to the participants (101%) is based on the coverage monitor of the external advisor at the end of December, 2008. The coverage ratio percentage in the supervisory-quarterly reporting is different." PARTICIPATING ORGANIZATION # 2 (2009e) Minutes of pension fund board meeting 13-03-2009. Arnhem.

about the strategic asset management. Obviously the current matching portfolio is 80% instead of 65%, which is the standard. The change took place as a result of a decision of the asset manager to tactically underweight the present strategic standard of 65-35%. The board decided that the current strategic standard for asset mix should be maintained as 65% matching portfolio and 35% return portfolio. It should be a tactical underweight position in accordance with the actual 80/20-distribution to be maintained. In the phase of the action when the decision is at stake, the question is: Are decisions taken regarding the coverage ratio? The answer to the question is affirmative. The mandate of the asset manager as well as the different asset portfolio's are discussed several times. However, facts reported in the minutes are:

1. No correct information is available.
2. Beneficiaries are informed with incorrect information about the coverage ratio.
3. The supervisor was informed with incorrect information about the coverage ratio.
4. The asset manager changed the asset portfolios in such a way that there was a more matching asset portfolio for hedging the interest risk so it would decrease the interest risk.
5. The asset manager retrospectively asked permission to change the portfolios.
6. Decisions were made which had an impact on the coverage ratio in the researched period.

5.2.5.2 Evaluation

Twelve questions with either 'yes' or 'no' as possible answers were raised about the evaluation of the entire decision-making process regarding the subject of the coverage ratio. The questions give a picture of the lessons learnt and any change to which these questions have led. The results of the given answers are shown in Table 5-42.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Evaluation	3	12				
Total nr. of questions		36	30	83	6	17

Table 5-42: Overview of answers regarding fact-finding decision.

The facts are:

1. In the questionnaires 17% of the responses on the subject of evaluation are non- identical answers.
2. One of these non-identical answers concerned the question whether any lessons were learned. One of the answers was: UNKNOWN.
3. When the question of whether there were lessons learned is answered ambiguously, it is impossible to determine whether changes since then emerge from the decision-making process around the coverage ratio or otherwise.

By summarizing the facts and results of the questionnaires, a conclusion can be drawn concerning the fourth phase of the decision-making process, in which the two variables of the action are researched.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Decision	3	24	21	88	3	12
Evaluation	3	36	30	83	6	17
Total nr. of questions about Phase 4: Action		60	51	85	9	15

Table 5-43: Overview of answers regarding fact-finding phase 4.

The available information does not show who is responsible for the implementation or control of the decision. It seems as if personal involvement is the basis on which the decision-making and the implementation is based. Whether the board takes informed action or not is tested in Phase 4 of the

conceptual research model. The board acted without verifying the facts or written documentation in which alternatives could have been discussed and ignored agreed procedures.

Based on these facts, the following conclusion can be drawn: the information for deciding about the coverage ratio was not correct, nor verified. Even an action conducted by the asset manager without prior knowledge was not discussed. Due to the fact that eventually it turned out to be the best, the asset manager was not asked for his motivation. During the interview (Participating organization # 2, 2012), the chairman provided the following statements:

1. Better decision-making had to be logged. Displays mean, that decisions taken in the informal circuit should be documented and established.
2. The decisions taken informally would need to be confirmed by the board.
3. The practical setting of board members detracts from the importance of transparency and accountability that is pursued by the pension fund governance rules and regulations.

5.2.6 Comparison of TO BE and AS IS Process of Decision-Making

The following table shows the TO BE and AS IS situation of the fundament of the processes.

Basis	TO BE based on law and regulation	AS IS	Pension fund governance function
IOPS regulation & pension fund governance rules	Mission, vision, strategy	Not available	Careful Management
IOPS regulation & pension fund governance rules	Description of decision-making process	Not available	Careful Management
33 Pension Act: Controlled and sound operations.	A clear and adequate organisational structure.	An organization chart is available.	Careful Management & Openness
33 Pension Act: Controlled and sound operations.	A description of responsibilities of the board (members).	A short description of some responsibilities can be found in the internal control rules.	Careful Management, Accountability & Expertise

Table 5-44: Overview of fundament of decision-making processes.

5.2.6.1 Comparison TO BE and AS IS Phase 1: Availability of Data

Considering the phase of availability of data a clear and adequate division of roles and responsibilities should be organized. Appointments for receiving information considering assets, liabilities and developments are set out in the internal control rules and AOM. From the process perspective, the following differences analysis is drafted. For phase 1: Availability of data the following is established. One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise and openness.

TO BE process	AS IS process
1. "Section 4.1 AOM. Administrative reports. The service provider provides the board periodically called administrative reporting, in which significant developments are reported. On the basis of the administrative reports, the service provider is also able to say all those things that the board enables the board to act to parties involved.	1.Information about liabilities was not available and timely as vaguely described in AOM. Vague verbally agreements are made with asset manager.
2. Section 4.2. AOM (Quarterly) investment reports. The service provider provides a quarterly investment report that meets the requirements of the regulator investment reports and quarterly investments reports.	2.No information about the assets was exchanged. The numbers exchanged with the supervisor were verbally gathered and noted without any check or comparison.
3. Section 4.3. AOM Coverage ratio reports. Developments such as those listed in the above sections 4.1en 4.2 are presented together in periodic coverage ratio reports that meet the FTK as defined in the Pension Act. The coverage ratio reports provide the board with a handle for taking future (policy) decisions and conducting continuity analysis.	3.A graphical chart with the coverage ratio information was provided. The information was not correct. Before the board meeting informal contact between two out of three board members was established to exchange information about the coverage ratio. This information was based on a personal administration of one of the board members

Table 5-45: Comparison TO BE versus AS IS phase 1.

5.2.6.2 Comparison TO BE and AS IS Phase 2: Awareness

One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise

and openness. From the process perspective, the following differences analysis is drafted.

TO BE process	AS IS process
1. The manager in consultation with the external service provider (government body) sets up the agenda of the board meeting.	1. The chairman found it necessary to put the subject coverage ratio on the agenda. 2. Minutes of board meeting indicated that in the annual report of 2007 a difference of approximately two million euros should be explained before finalizing the year report. Board did not take action. 3. Incorrect information about coverage ratio was communicated with participants. Board did not take action. 4. Incorrect information about coverage ratio was communicated with supervisor. Board did not take action.

Table 5-46: Comparison TO BE versus AS IS phase 2.

5.2.6.3 Comparison TO BE and AS IS Phase 3: Analysis

One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise and openness. From the process perspective, the following differences analysis is drafted.

TO BE process	AS IS process
1. The agenda together with the gathered information is sent to the board members in advance of the meeting.	1. The process is not conducted as should be. 2. The chart of the external service provider was exchanged to the board members before the meeting started.

Table 5-47 Comparison TO BE versus AS IS Phase 3.

5.2.6.4 Comparison TO BE and AS IS Phase 4: Action

One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise,

openness, and communication. From the process perspective, the following differences analysis is drafted.

TO BE process	AS IS process
1. The board decides.	1. The asset manager verbally informed the board he changed the asset mix. This is in conflict with the AOM and the contract. 2. The asset manager changed the hedging of the interest risk without an decision of the board. 3. The board agreed afterwards (4 months after the change took place) with the decisions of the asset manager.

Table 5-48: Comparison TO BE versus AS IS Phase 4.

During the interview (Participating organization # 2, 2012) the chairman gave his personal view on the established facts.

The pension fund was established in 2006, after the mother organization had sold the business part. This sale led to the legal obligation for the pension fund to dispose of the pension entitlements of participants involved. The sold company took the decision to set up a new company pension fund. The sold business became the new financial sponsor. The workforce of the sponsor organization consisted of two branches of which one was the headquarters and the other the factory. This led to problems. To staff the board and the various committees was virtually impossible. As a consequence the advisors and service providers had the upper hand in delivering knowledge. That is an understandable but undesirable situation afterwards. It is feasible that by this dependence matters may not go well. This dependency and lack of financial instruments makes the board convinced that survival as an independent pension fund after the liquidation of the financial sponsor was not attainable. Ultimately the board decided to liquidate the pension fund in 2010 and transferred the obligations to an insurer. The closed deal is well received by all participants noted. As one of the few former pension funds have noted, participants about 2.73% index retrieved from last year. This is 78% of the Harmonised Index of Consumer Prices excluding tobacco (HICP excl T). In short, all's well that ends well.

5.3 Empirical Data of Participating Organization # 3

The participating organization number three (# 3) has some specific characteristics. It differs from the other cases in terms of design, number of participants, assets and liabilities. A brief outline of the participating organization is included in the following section.

5.3.1 Outline of Participating Organization # 3

The following outline is based on four documents (Participating organization # 3, 2008e, 2009b, 2010a, 2010d).

Facts company pension fund # 3	Year 2008	Year 2009
(former) participants		
Participants	953	936
Former participants	573	570
Beneficiaries	1,457	1,454
TOTAL	2,983	2,960
Coverage ratio		
Valuation at market value of liabilities	€ 345,836,000	€ 365,838,000
Assets ³¹	€ 441,174,000	€ 476,015,000
Coverage ratio according to annual report ³²	127.6%	130.1%
Board		
General management board	8 members	8 members
Representation of employer	4 members	4 members
Representation of employees	3 members	3 members
Representation of beneficiaries	1 member	1 member

³¹ The strategic investment portfolio consisted of a matching and a return portfolio. During the year 2008 the interest rate for the entire coverage ratio was fully hedged. Firstly in May 2009 the level of interest rate hedging was lowered to 110 percent of the coverage ratio. Secondly per September 2009 the hedging was lowered to 100 percent of the coverage ratio.

³² The coverage ratio is calculated and presented as legally defined.

Facts company pension fund # 3 cont'd	Year 2008	Year 2009
Organization		
Executive Committee	Yes	Yes
Manager/director	0	0
Investment Advisory Committee	Yes	Yes
Supervisory board	No	No
Accountability body	Yes	Yes
Complaints Committee	No	No
Review Committee	Yes	Yes
Members' council	Yes	Yes
External service providers		
Accountant	Yes	Yes
Actuary	Yes	Yes
Fiduciary manager (asset manager)	Yes	Yes
Administration	Yes	Yes
Government body	Yes	Yes
Re-insurance (type A see section 1.3.1)	No	No

Table 5-49: Outline of participating organization # 3.

Looking at the participating organization # 3 and Table 5-49, one can see that only one governance body was installed. However, this should be nuanced. In article 28 of the Statute, a system for complaints and disputes is regulated. The board of the pension fund designated the government body to deal with any complaints or disputes in the first instance. If the parties do not come to an agreement on the solution of the complaint or the dispute, the board will take over. In short, there is a complaint regulation but the question is whether this complies with the governance rules. There is doubt, because the treating authority is not complying with these rules. The second issue is the Supervisory board. In terms of pension fund governance a pension fund board can decide to install a permanent Supervisory board or an Accountability body. The participating organization had chosen to install an Accountability body.

To gain better insight into, and to conduct data triangulation about, the decision-making process concerning coverage ratios in the studied organization the following documents were used during the desk research phase:

- Organization chart (Participating organization # 3, 2010d).

- Two annual reports 2008 and 2009 (Participating organization # 3, 2008e, 2009b).
- Actuarial and Operating Memorandum (Participating organization # 3, 2010a).
- Five agendas of pension fund board meetings (Participating organization # 3, 2008a, 2008b, 2008c, 2008d, 2009a).
- The stature of the Investment Advisory Committee (Participating organization # 3, 2008f).
- Matrix of functions and responsibilities allocation (Participating organization # 3, 2010b).
- A description of the pension fund investment process (Participating organization # 3, 2010e).
- Two reports of the Accountability body (Participating organization # 3, 2009c, 2010f).
- Report of the Review Committee (Participating organization # 3, 2010c).

Besides the aforementioned documents the chairman of the board and the manager of the government body completed a questionnaire (Participating organization # 3, 2011a, 2011b). During 2009 five new board members were appointed. Three board members who were a board member during the research period were asked to participate. Two of them returned the completed questionnaire. Documents containing the Mission, Vision and Strategy and the decision-making process(es) were missing. However, in different documents and Statute parts are pre- and described. This means that there is not an agreed policy document available. To check and verify the findings one interview was conducted (Participating organization # 3, 2012).

5.3.2 Phase 1: Availability of Data

In this phase it was researched whether the information necessary for the decision-making process about the coverage ratio was available. In chapter 3 of the document regarding the pension fund investment process (Participating organization # 3, 2010e) it is recorded that the fiduciary manager will deliver reports, while the custodian performs a shadow administration. In chapter five of the same document it is recorded that the fiduciary manager provides monthly

and quarterly reports and performance measurements. The Investment Advisory Committee provides a quarterly report to the board and every board meeting the board is informed about the state of affairs verbally. The agendas of the board meetings (Participating organization # 3, 2008a, 2008c, 2008d, 2009a) show that under the heading 'notices' the subject 'Chairman of Investment Advisory Committee' is mentioned every time.

The next sections will provide insight into the fact-findings of this stage of the conceptual model.

5.3.2.1 Information about Coverage Ratio

As mentioned before, two questionnaires were returned. The answers given are shown in Table 5-50.

Location	Assets July 1st 2008	Assets Oct 1st 2008	Assets Jan 1st 2009	Assets April 1st 2009
Respondent 1	€ 401,100,000	€ 417,400,000	€ 441,200,000	€ 456,900,000
Respondent 2	€ 401,100,000	€ 417,400,000	€ 441,200,000	€ 456,900,000
Annual report 2008	Not reported	Not reported	€ 441,174,000	
Annual report 2009			Not reported	Not reported
Deviation between highest and lowest reported number	€ 0.00 0%	€ 0.00 0%	€ 6,000 0.00136%	€ 0.00 0%

Table 5-50: Fact-finding about assets.

The annual report includes only the amount of assets on December 31st of any year. From the figures of the previous table it can be deduced that the information about the assets is shared with the board members.

The questionnaires and the year report of 2008 show the following information about the liabilities (see Table 5-51).

Location	Liabilities July 1, 2008	Liabilities Oct. 1, 2008	Liabilities Jan. 1, 2009	Liabilities April 1, 2009
Respondent 1	€ 299,300,000	307,800,000	€ 345,800,000	€ 359,800,000
Respondent 2	€ 299,300,000	307,800,000	€ 345,800,000	€ 359,800,000
Annual report 2008	Not reported	Not reported	€ 345,836,000	
Annual report 2009			Not reported	Not reported
Deviation between highest and lowest reported number	€ 0.00 0%	€ 0.00 0%	€ 36,000 0.001%	€ 0.00 0%

Table 5-51: Fact-finding about liabilities.

The annual report includes only the amount of liabilities on December 31st of any year. Looking at the coverage ratio it is no longer surprising that, once again, both the respondents provide identical information, as is shown in the following Table 5-52.

Location	Coverage ratio July 1, 2008	Coverage ratio Oct. 1, 2008	Coverage ratio Jan. 1, 2009	Coverage ratio April 1, 2009
Respondent 1	134%	135.6%	127.6%	127%
Respondent 2	134%	135.6%	127.6%	127%
Annual report 2008	Not reported	Not reported	127.6%	
Annual report 2009				Not reported

Table 5-52: Fact-finding about coverage ratio.

The annual report only includes the coverage ratio on December 31st of any year. To summarize the answers of the questionnaires about the fact-finding stage of the variable of the coverage ratio, the following can be stated:

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Assets	2	5				
Total nr. of questions		10	10	100	0	0
Liabilities	2	5				
Total nr. of questions		10	10	100	0	0
Coverage ratio	2	4				
Total nr. of questions		8	8	100	0	0
Other	2	8				
Total nr. of questions		16	14	88	2	12
TOTAL		44	42	95	2	5

Table 5-53: Overview of answers regarding fact-finding coverage ratio.

In 2007 the participating organization # 3 chose to divide the investment portfolio in two parts: one to cover the interest risk, which is the matching portfolio, and one called the return portfolio. In determining the investment policy the board carefully weighs the benefits (more security) and disadvantages (less return) of more or less duration matching off compared to alternative strategies. During the year 2008 the interest rate for the entire coverage ratio was fully hedged. In May 2009 (Participating organization # 3, 2009b) the participating organization changed the investment policy. Based on the expectation that the risk of further decline in interest rates had declined significantly, the board on advice of the Investment Advisory Committee reduced the interest hedging in two steps. Firstly in May 2009 the level of interest rate hedging was lowered to 110 percent of the coverage ratio. Secondly per September the hedging was lowered to 100 percent of the coverage ratio.

To summarize the facts of the first variable of phase 1 - information about the coverage ratio - the following is established:

1. In the questionnaires 5% of the responses on the information about coverage ratio are non-identical. It is described what the board would receive in terms of information reports, so there would be no difference within the board about the investments, the liabilities, and the coverage ratio. This figure confirms the impression that the pension fund has a very active

information exchange about the investment policy. For this cause, various documents are drawn up and the execution is very closely monitored.

2. The board had chosen for hedging the interest risk by a matching portfolio.
3. The set-up of the matching portfolio covered the interest risk of the entire coverage ratio in 2008. In 2009, after the research period, the policy changed.

5.3.2.2 Pension Fund Governance Principles

The second variable in the first phase of the research model is pension fund governance. The question, which should be answered, is whether the fund has implemented the required proper governance measures, and if so, if the participating organization # 3 has complied with the rules of pension fund governance. Based on the Decree on the Implementation of the Pension Act, the following committees should have been installed: Accountability body or Supervisory board, Review Committee, Complaints Committee and Members' council.

Hereafter, the facts concerning the participation of different committees in the decision-making process about the coverage ratio are discussed. The documents show, that:

1. There were only two meetings (Participating organization # 3, 2009c, 2010f) with the Accountability body. Both meetings were beyond the research period. The Accountability body was only informed about the situation during the meetings with the board. No information was exchanged during the research period.
2. There is only one report from the Review Committee (Participating organization # 3, 2010c).

To summarize the results of the questionnaires about the fact-finding stage of the coverage ratio, the following can be established (see Table 5-54).

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Pension fund governance	2	14				
Total nr. of questions		28	22	78	6	22

Table 5-54: Overview of answers regarding fact-finding pension fund governance.

To summarize, the facts of the second variable of phase 1, which is pension fund governance, are as follows:

1. In the questionnaires, 22% of the responses on the information about pension fund governance are non-identical answers.
2. A Complaints Committee is not installed, but there is an internal regulation that deals with the handling of complaints.

The non-identical answers are not vital for the decision-making process. It only covers knowledge about internal procedures and bodies.

5.3.2.3 Default Settings

Neither default settings, nor references to them were found in the various examined documents. In the questionnaires, questions about different default settings were raised as to whether default settings exist in practice. To plan meetings the fund produces a year calendar with dates and meetings. In practice this calendar shows the minimum of meetings. Intermediate meetings are scheduled due to unplanned circumstances, which occur yearly. The questionnaires showed that one of the respondents confirmed that checklists are used, while the other respondent answered this same question in the negative. The answers in the questionnaires about the fact-finding stage of the default settings are shown in the following Table 5-55.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Default settings	2	12				
Total nr. of questions		24	18	75	6	25

Table 5-55: Overview of answers regarding fact-finding default settings.

A summary of the facts of the 3rd variable of phase 1:

1. In the questionnaires, 25% of the responses on the subject default settings are non-identical answers.
2. In the received questionnaires there is doubt whether checklists are used regarding the decision-making process. During the interview the chairman told that no checklists were used but they've standardized the information flow.

Again, the non-identical answers are not vital for the decision-making process. In the following Table 5-56 a summary of the results of the questionnaires are shown.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Information about coverage ratio	2	44	42	95	2	5
Pension fund governance rules	2	28	22	78	6	22
Default settings	2	24	18	75	6	25
Total nr. of questions about Phase 1: Availability of data		96	82	85	14	15

Table 5-56: Overview of answers regarding fact-finding phase 1.

The facts are:

1. In the questionnaires 15% of the responses on the subject of availability of data are non-identical answers.
2. Interest rate immunization is established by cash flow matching of 100% of the entire coverage ratio.

3. On July 1, 2008 the decision-making process of participating organization # 3 regarding the coverage ratio is organized in such a way (Participating organization # 3, 2008f, 2010a, 2010e) that the information necessary to calculate the coverage ratio is available.
4. No checklists are used.

On this premise the answers in the questionnaires, agendas, minutes of board meetings and interview show whether the fund fulfilled its legal obligations for controlled and sound operations and to the internal agreements about preparing meetings or decisions and risk management. If the board fulfilled its obligations it was able to respond. Based on the facts obtained, the following conclusion can be drawn: the information for continuing the decision-making process about the coverage ratio should be available and, in practice, is available.

Based on this, another conclusion is that the board had fulfilled its legal and internal obligations and was completely in control. Control in this sense means: due to the fact that a complete policy note is missing, is the board prudently taking care of the assets so the fund can pay the pension entitlements? The answer is affirmative.

5.3.3 Phase 2: Awareness

The phase of awareness in the conceptual research model verifies whether the board had fulfilled its legal but most and above all its internal rules. The added value lies especially in risk management. In other words, it questions if the board was aware that something was happening that formed a possible exceptional risk for the coverage ratio. In this phase, three variables are researched to provide an idea of whether the actual situation was recognized as a problem. Based upon the previous phase of the conceptual research model, a clear view on the actual situation should be available, because all the data was there.

5.3.3.1 Actual Situation

Phase 1 was completed with correct information. In that phase only 7 percent of the given answers are non-identical. There was no difference in answers given to the questions about the assets, the liabilities and the coverage ratio. The questions about the setting of the agenda show the following (see Table 5-57).

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Actual situation	2	2				
Total nr. of questions		4	4	100	0	0

Table 5-57: Overview of answers regarding fact-finding in the actual situation.

Again the process is organized in a very strict way, in which everyone knows what to do.

5.3.3.2 Context

The second variable in the second phase of the research model is context. The given answers in the questionnaires show the following (see Table 5-58).

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Context	2	6				
Total nr. of questions		12	4	33	8	67

Table 5-58: Overview of answers regarding fact-finding context.

Most answers are non-identical which is shown in Table 5-58. This means that on the basis of the given answers, personal biases can be demonstrated. The differences in responses occur in the following questions:

1. We are alerted when we should do something.
2. Time constraints have played a role in the care of decision-making process.

3. Time constraints have played a role in the way of awareness.
4. Time constraints have played a role in the recognition of the problem.

As mentioned in before as time pressure increases, our ability to examine and compare choice alternatives is challenged, and the decision-making process is modified. Time pressures can increase biasing effects (Kruglanski and Freund, 1983, Freund et al., 1985), perhaps because information selectivity is higher and decision criteria thresholds are lower (Dror et al., 1999). The study by Papadakis and Lioukas (1996) claimed that in crisis situations, decisions posing pressure seem to be subjected to the formal rules. That happened in this situation as well. The formal procedures and thereby the process of decision-making during the research period was not adjusted. The internal regulations how decisions serve to come were strictly followed. This endorses the study by Papadakis and Lioukas in this sense.

5.3.3.3 Problem Recognition

The questionnaires considering this issue show the following results (see Table 5-59).

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Problem recognition	2	3				
Total nr. of questions		6	2	33	4	67

Table 5-59: Overview of answers regarding fact-finding problem recognition.

In terms of problem recognition one of the respondents answered that the issue of coverage ratio is not a problem. That is the reason that the recognition of the problem was not a joint position. Looking at the figures in Table 5-45 one can read that the coverage ratio ultimo 2008 was 127.6%. This figure is far above the required coverage ratio of 105%. The risk appetite and the attention to risk

was the cause of the different answer. One respondent thought, we have the matter well ‘in control’, while the other respondent thought, you never know what might happen.

A summary of the facts and results of the questionnaires can lead to a conclusion concerning the second phase of the decision-making process, in which three variables of the awareness phase were researched.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Actual situation	2	4	4	100	0	0
Context	2	12	4	33	8	67
Problem recognition	2	6	2	33	4	67
Total nr. of questions about Phase 2: Awareness		22	10	45	12	55

Table 5-60: Overview of answers regarding fact-finding phase 2.

The facts are:

1. In the questionnaires 55% of the responses on the subject of awareness are non- identical answers.
2. The respondents knew the exact and agreed process of the agenda setting.
3. The subject of the coverage ratio as such was not on the agenda during the studied period. However, the subject was covered by the agenda item: notices under which the chairman of the Investment Advisory Committee verbally explained what was done and why, regarding the investments.
4. The coverage ratio was not in danger because of the fulfilled hedging strategy. This was the maximum risk mitigating measure the fund could have taken.

The fact that 55 percent of the responses are non-identical answers could have an influence on the decision-making process. This could be the case because the identified biases are responsible for the number of non-identical answers. On this premise the answers in the questionnaires, agendas, minutes of board meetings and interviews show whether the fund fulfilled its legal obligations for

the organization of sound business processes and risks management and to the internal agreements about risk management and preparing meetings or decisions. The answer to the question whether the funds have fulfilled their obligations show whether the board was adaptive to the situation.

Based on these facts, the following conclusion can be drawn: the data for continuing the decision-making process about the coverage ratio was influenced due to personal biases, because time constraints played a role for at least one board member. However, the decision-making process was continued as agreed in the internal agreements about risk management and preparing meetings or decisions. As mentioned before this endorses the study by Papadakis and Lioukas (1996). As a result the board was adaptive to the situation, as ascertained from agendas of the board meetings.

5.3.4 Phase 3: Analysis

The third phase of the conceptual research model revolves around the question how the analysis of these subjects takes place. Six questions research two variables of the subject. The first variable is meeting preparation.

5.3.4.1 Meeting Preparation

There is unanimity in the responses provided by two board members, which is shown in the following Table 5-61.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Meeting preparation	2	3				
Total nr. of questions		6	4	67	2	33

Table 5-61: Overview of answers regarding fact-finding meeting preparation.

There were fixed agenda items. However, the subject coverage ratio came under the heading 'notices'. Usually, 'notices' are not prepared in advance, but

are given during the meeting. This is also the case in this specific situation. That is the reason why one of the respondents answered that no alternatives were gathered regarding the subject of coverage ratio.

5.3.4.2 Meeting

There is almost unanimity in the answers regarding the meeting, which is shown in the following Table 5-62.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Meeting	2	3				
Total nr. of questions		6	6	100	0	0

Table 5-62: Overview of answers regarding fact-finding meeting.

By summarizing the gathered information in the questionnaires, a conclusion can be reached concerning the third phase of the decision-making process, which entails the analysis of the research of the two variables.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Meeting preparation	2	6	4	67	2	33
Meeting	2	6	6	100	0	0
Total nr. of questions about Phase 3: Analysis		12	10	83	2	17

Table 5-63: Overview of answers regarding fact-finding phase 3.

The facts are:

1. In the questionnaires 17% of the responses on the subject of analysis are non- identical answers.
2. The setup of the meetings is carried out as required and agreed in the policy document.

3. Not all the subjects are prepared, analysed and distributed before the meeting. This certainly counts for the subject coverage ratio.

The answer to the questions raised in this phase shows whether the board was ready to respond. The board did respond to the situation, and during meetings new information was taken into account. The board continued the decision-making process. The conclusion for this phase of the conceptual research model is the following: the meetings were prepared and organized, as they were supposed to be. Therefore it can be concluded that the board was ready to respond.

5.3.5 Phase 4: Action

In the fourth and last phase of the conceptual research model the question is how the act of decision-making is conducted, and how the entire decision-making process about the coverage ratio is evaluated. Two variables answer this question. The first variable is decision.

5.3.5.1 Decision

Five questions with a yes or no answer were raised about the action labelled 'decision'. With these questions, a view on the control over the activities in the decision-making process about the coverage ratio is established. The other three questions are open. They speculate about the way of this process was conducted. The results of the given answers are shown in the following Table 5-64.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Decision	2	8				
Total nr. of questions		16	10	63	6	37

Table 5-64: Overview of answers regarding fact-finding decision.

In the phase of the action when the decision is at stake, the question is: Are decisions taken regarding the coverage ratio? The answer to the question is unknown, due to the fact that minutes of board meetings were not handed over to the researcher. It is established that the fund is fully in control and that it could have made decisions about the subject of coverage ratio, because all the necessary required data was available.

5.3.5.2 Evaluation

Twelve questions with either 'yes' or 'no' as possible answers were raised about the evaluation of the entire decision-making process regarding the subject of the coverage ratio. The questions give a picture of the lessons learnt and any change to which these questions have led.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Evaluation	2	12				
Total nr. of questions		24	20	83	4	17

Table 5-65: Overview of answers regarding fact-finding decision.

The fact is:

1. In the questionnaires 17% of the responses on the subject of evaluation are non- identical answers.

By summarizing answers in questionnaires, a conclusion can be drawn concerning the fourth phase of the decision-making process, in which the two variables of this process are researched.

SUBJECT	Respon- dents	Number of questions	Identical answers	% Identical answers	Non- identical answers	% Non- identical answers
Decision	2	16	10	63	6	37
Evaluation	2	24	20	83	4	17
Total nr. of questions about Phase 4: Action		40	30	75	10	25

Table 5-66: Overview of answers regarding fact-finding phase 4.

On this premise the answer shows whether the board takes action or not. The board acted on correct information about assets, liabilities and coverage ratio. With all the given answers, an opinion can be justified concerning the quality of the decision-making process regarding the coverage ratio and therefore the activity of control. The quality of the decision-making process was very appropriate.

5.3.6 Comparison of TO BE and AS IS Process of Decision-Making

The following table shows the TO BE and AS IS situation of the fundament of the processes.

Basis	TO BE based on law and regulation	AS IS	Pension fund governance function
IOPS regulation & pension fund governance rules	Mission, vision, strategy	Elements are available in the Statue of the fund.	Careful Management
IOPS regulation & pension fund governance rules	Description of decision-making process	Not available	Careful Management
33 Pension Act: Controlled and sound operations.	A clear and adequate organisational structure.	An organization chart is available.	Careful Management & Openness
33 Pension Act: Controlled and sound operations.	A description of responsibilities of the board (members).	Yes, a document containing an extensive description of responsibilities of board (members) is available.	Careful Management, Accountability & Expertise

Table 5-67: Overview of fundament of decision-making processes.

5.3.6.1 Comparison TO BE and AS IS Phase 1: Availability of Data

Considering the phase of availability of data a clear and adequate division of roles and responsibilities should be organized. Appointments for receiving information considering assets, liabilities and developments are set out in the internal control rules and AOM. From the process perspective, the following differences analysis is drafted. For phase 1: Availability of data the following is established. One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise and openness.

TO BE process	AS IS process
<ol style="list-style-type: none"> 1. The government body should inform the full board of all relevant management information. In the AOM examples are given. One of them is at the latest 6 week after the quarter end an extensive financial report should be made. Included should be: <ol style="list-style-type: none"> a. Composition of the investments. b. Investment results. c. Pension paid. d. Received premium/ lump-sum premium. e. Costs. f. Development of pension entitlements. 2. The fiduciary manager will deliver a monthly and quarterly report and performance measurement. 3. The custodian performs a shadow administration³³. 4. The Investment Advisory Committee provides a quarterly report to the board and every board meeting the board is informed about the state of affairs verbally. 	<ol style="list-style-type: none"> 1. The process begins with the collection of information. Appointments are set out in the various documents. Who delivers which information to whom? It is shown that this part of the process is monitored properly. Each vendor does what is demanded of him and delivers the Investment Advisory Committee the required information.

Table 5-68: Comparison TO BE versus AS IS phase 1.

³³ For governance purposes the custodian checked the figures provided by the fiduciary manager.

5.3.6.2 Comparison TO BE and AS IS Phase 2: Awareness

One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise and openness. From the process perspective, the following differences analysis is drafted.

TO BE process	AS IS process
1. The asset portfolio consists of two portfolios. One is set up to hedge the interest risk. The other one is the return portfolio. The level to which the interest rate is hedged is dependent on the actual interest rate. During the research period the interest rate was fully hedged for the entire coverage ratio.	<div>1. The committee assesses, in consultation with the fiduciary manager, whether there are developments requiring action. In that consultation the results of investments versus that of the benchmark, as well as the possible adjustments are discussed when there have been unwanted developments.</div> <div>2. The Investment Advisory Committee did not assess the situation as not required or dangerous. They base their judgment on the fact that the interest risk of the entire investment portfolio was hedged and the actual coverage ratio was above the required solvency level.</div>

Table 5-69: Comparison TO BE versus AS IS phase 2.

5.3.6.3 Comparison TO BE and AS IS Phase 3: Analysis

One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise and openness. From the process perspective, the following differences analysis is drafted.

TO BE process	AS IS process
1. The agenda together with the gathered information is sent to the board members in advance of the meeting.	1. The committee assesses, in consultation with the fiduciary manager, whether there are developments requiring action. In that consultation the results of investments versus that of the benchmark, as well as the possible adjustments are discussed when there have been unwanted developments.

TO BE process Cont'd	AS IS process Cont'd
	<ol style="list-style-type: none"> 2. After the consultation and discussion the Investment Advisory Committee takes a decision whether a decision of the board is required. 3. Before every regular meeting of the board an agenda is set up in joint collaboration by the chairman, the secretary and the manager of the government body. A fixed agenda item is notices

Table 5-70: Comparison TO BE versus AS IS Phase 3.

5.3.6.4 Comparison TO BE and AS IS Phase 4: Action

One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise, openness, and communication. From the process perspective, the following differences analysis is drafted.

TO BE process	AS IS process
<ol style="list-style-type: none"> 1. The board determines the investment policy. 	<ol style="list-style-type: none"> 1. During the discussion of the notices three people: the secretary, the manager of the government body and the chairman of the Investment Advisory Committee verbally exchange information. 2. The Investment Advisory Committee provides a quarterly report to the board and every board meeting the board is informed about the state of affairs verbally. 3. When a decision of the board is required the board decides what information they need for a decision. Its preparation is put back to the Investment Advisory Committee and its consideration is postponed to a future board meeting. 4. The executive committee, if not assigned to portfolio holders or a (ad hoc) Working Group of the board, prepare the board decisions take care for the development and settlement of the board decisions.

Table 5-71: Comparison TO BE versus AS IS Phase 4.

5.4 Empirical Data of Participating Organization # 4

The participating organization number four (# 4) has some specific characteristics. It differs from all the other cases not only in terms of design, number of participants, assets and liabilities, but also with regard to the re-insurance contract. The re-insurance contract deserves explanation. The insurer guarantees all the promised pension entitlements (accrued rights and pension benefits) after the end of contract (December 31, 2011). After the end of the contract the pension fund can leave the pension entitlements with the insurer. This situation has a consequence for the pension fund. Coverage ratio as such is not a management variable, because regardless of the coverage ratio the pension entitlements can be left with the insurer without having to pay something extra. The price for that warranty is already purchased and paid annually and is discounted in the premium. Even the supervisor controls it in a different way, because there is little risk for the pension fund. The fund will not end up in a position where it cannot pay the pension entitlements. It will only occur if the insurance company goes bankrupt. In 2007, DNB published a circular stating points they completely reassessed its supervision of completely reinsured pension funds. Two points from the circular are of specific importance:

1. When the re-insurer has a credit quality of AA- or better than the pension fund, he does not need additional reserves for the claim against the insurer. In October 2009 Standard and Poor's changed the credit rating of the insurer by lowering the rating from AA- to A+.
2. The fully reinsured pension funds must create a recovery plan if the rating (creditworthiness) of the re-insurer falls under a certain norm. This was the case in October 2009.

Knowing that there is a reinsurance contract the question is: Is coverage ratio important for the pension fund? The answer is YES. The coverage ratio is important for the indexation. When the fund has a coverage ratio above 110% it becomes feasible for the board to decide to grant an indexation percentage. Secondly, coverage ratio is important for fully re-insured funds as well, because control in that situation still means: is the board doing what it legally is

supposed to do? Based on law the fund is and remains responsible for controlled and sound operations (art. 33 Pension Act), outsourcing (art. 34 Pension Act), control and integrity of business operations (art. 143 Pension Act), business processes and business risks (art. 18-22 Pension Fund Decree). Summarized, outsourcing does not eliminate responsibilities of the fund. The fund should have established an information flow and checked the data thoroughly before they could lean back. Secondly, the indexation is dependent on the coverage ratio. Thirdly, law prescribes that a recovery plan should be made up when the fund has a finding shortfall. The Minister of Social Affairs and Employment changed this requirement in 2010 for only one year.

5.4.1 Outline of Participating Organization # 4

The following outline is based on four documents (Participating organization # 4, 2008a, 2008d, 2008i, 2009a).

Facts company pension fund # 4	Year 2008	Year 2009
(former) participants		
Participants	174	174
Former participants	112	122
Beneficiaries	91	95
TOTAL	377	391
Coverage ratio		
Valuation at market value of liabilities	€ 31,631,000	€ 32,527,000
Assets ³⁴	€ 30,444,000	€ 33,095,000
Coverage ratio according to annual report ³⁵	102.1%	95.6%%

³⁴ The investment portfolio consisted of 95% fixed income securities and 5% shares and properties.

³⁵ The coverage ratio is calculated as follows: own capital and reserves + the total sum of liabilities divided by the total sum of liabilities. For 2008 this was $(-€ 653 + €31,631,000)/(€31,631,000) \times 100\% = 102.1\%$. For 2009 this was $(-€ 1,417 + €32,527,000)/(€32,527,000) \times 100\% = 95.6\%$. The annual report mentions five different calculated coverage ratios. The added value of this is not explained in the interview or the annual report.

Facts company pension fund # 4 cont'd	Year 2008	Year 2009
Board		
General management board	5 members	5 members
Representation of employer	2 members	2 members
Representation of employees	2 members	2 members
Representation of beneficiaries	1 member	1 member
Organization		
Executive Committee	Yes	Yes
Manager/director	0	0
Investment Advisory Committee	No	No
Supervisory board	No	No
Accountability body	No	No
Complaints Committee	No	No
Review Committee	Yes	Yes
Members' council	No	No
External service providers		
Accountant	Yes	Yes
Actuary	Yes	Yes
Fiduciary manager (asset manager)	Yes	Yes
Administration	Yes	Yes
Government body	Yes	Yes
Re-insurance (100% re-insured, type B 1.1 see section 1.3.1)	Yes	Yes

Table 5-72: Outline of participating organization # 4.

Looking at the participating organization # 4 and Table, 5-72 it must be concluded that not all bodies required by pension fund governance were implemented. The Accountability body, the Complaints Committee, and Member' Council were not installed although this is mandatory by law. In terms of pension fund governance a pension fund board can decide to install a permanent Supervisory board or an Accountability body. The participating organization had not undertaken any action at all to install a Supervisory board or an Accountability body.

To gain better insight into, and to conduct data triangulation about the decision-making process concerning coverage ratios in the studied organization, the following documents were used during the desk research phase:

- Organization chart (Participating organization # 4, 2008i).
- Two annual reports 2008 and 2009 (Participating organization # 4, 2008d, 2009a).
- Actuarial and Operating Memorandum (Participating organization # 4, 2008a).
- Two agendas of pension fund board meetings (Participating organization # 4, 2008b, 2008c).
- Four minutes of pension fund board meetings (Participating organization # 4, 2008e, 2008f, 2008g, 2009b).
- Minutes of the extraordinary meeting of participants (Participating organization # 4, 2008h).
- Summary of the report of the Review Committee (Participating organization # 4, 2009d).
- Summary of the report of the Accountability body (Participating organization # 4, 2009c).
- Letter with additional information about governance bodies (Participating organization # 4, 2010a).

Besides the aforementioned documents one member of the board completed a questionnaire (Participating organization # 4, 2010b). He was the only board member who was also a board member during the research period. Documents containing the Mission, Vision and Strategy and the decision-making process(es) were missing. To verify the findings one interview was conducted (Participating organization # 4, 2012). This took place on the July 12, 2012. Bearing in mind, that only one member of the board was willing to complete the questionnaire it is impossible to complete all tables shown in the previous sections of this chapter. However, there is richness in the data of the questionnaire, which should be presented.

5.4.2 Phase 1: Availability of Data

5.4.2.1 Information about Coverage Ratio

Information about the assets was available. This is in line with what has been described in the AOM. The questionnaire shows amounts for the requested period. The questionnaire does not show amounts of liabilities per requested period nor coverage ratio percentage. The question whether the interest risk was hedged was answered in the negative. This is not in line with reality and the AOM. In that document it is mentioned that the market value actuarial reserves are matched with 95% of the corresponding funds. During the interview the question was raised which of the two is correct. The information in the AOM is correct.

Another answer which needs clarification is the answer to the question whether it was contractually arranged when and how the information about the assets and liabilities are delivered. The answer was positive, although in the AOM it was not described that way. During the interview the respondent replied that only in the offer of the service provider was it mentioned that the information would be supplied. This is not confirmed in the contract or the service level agreement.

5.4.2.2 Pension Fund Governance Principles

As mentioned in section 5.4.1 the organization did not comply with the pension fund governance principles. The reason for this was that by its small size the fund was convinced that everything was well arranged. Due to the fact the fund is relatively small the costs to deploy as well as for the occupation are relatively high. The supervisor did not take any action to change the deviation of the pension fund governance principles. The interviewee was asked whether the supervisor informed why they did not took action. He answered that the supervisor did not informed him.

5.4.2.3 Default Settings

The default settings are defined in the Statute of the Fund. It states, among other things:

1. Fixed agenda topics.
2. The advance dissemination of meeting documents.

A checklist is not used for the preparation of the board meetings.

Although coverage ratio is an important element in the decision-making process, it is not mentioned as a fixed agenda topic.

The answers in the questionnaires, agendas, minutes of board meetings and interviews show whether the fund has fulfilled its legal obligations for controlled and sound operations as well as the internal agreements about preparing meetings or decisions and risk management. If the board fulfilled its obligations it was able to respond. No, the fund is not doing what it is supposed to do because the information about the coverage ratio or to calculate it is not available, therefore the board was not able to respond.

A coverage ratio based on available or distributed facts could not be calculated nor checked by each individual board member because the information was not available. Taken the AS IS information into account it must be concluded that the board was not able to respond because the appropriate information was lacking. This was due to faulty governance, because they had no insight in the actual operation of the organisation which - they should have.

5.4.3 Phase 2 Awareness

The questionnaire shows the following:

1. The board was responsible for putting the subject coverage ratio on the agenda.
2. The respondent thought that the board would be informed as soon as they needed to do something.
3. The subject coverage ratio was not recognized as an issue.

The previous answers show a somewhat tolerant attitude, because:

1. Discussions and decisions about indexation need to be based on the coverage ratio.
2. With a decrease of the credit rating of the insurer, there might be a too low coverage ratio, which at that stage will be an issue because a recovery plan should be created immediately.

On this premise the answers in the questionnaires, agendas, minutes of board meetings and interviews show whether the fund has fulfilled its obligations. The obligations are the organization of controlled and sound operations, outsourcing, business processes and business risks management and the internal agreements about risk management and preparing meetings or decisions. The answer to the question if the fund had fulfilled their obligations shows if the board was adaptive to the situation.

Based on these facts, the following conclusion can be drawn: the board was very aloof, because it was of the opinion that risk was not present. The relationship between coverage ratio and indexation potency did not lead to a change of opinion. This means that, the board was NOT adaptive to the situation, as ascertained from researched documents.

5.4.4 Phase 3: Analysis

Neither the questionnaire nor the documents contain information that is of direct concern to the description of this case.

5.4.5 Phase 4: Action

Attention is needed for the way the decisions are recorded. This is due to information coming from the minutes and the questionnaire. The respondent answered that it was recorded who controls the implementation of decisions and who reports about it. In none of the minutes the elements are found. During the interview the respondent answered that this was not recorded in the minutes, but in an annex called decisions list. In terms of evaluation the

respondent answered that lessons were learned. During the interview it is recorded that the most important lesson was: how do you go interact with each other as board members?

On this premise the answer shows whether the board takes action or not. The board did not act at all. With all the given answers, an opinion can be justified concerning the quality of the decision-making process regarding the coverage ratio and therefore the activity of control. The quality of the decision-making process needs improvement.

5.4.6 Comparison of TO BE and AS IS Process of Decision-Making

The following table shows the TO BE and AS IS situation of the fundament of the processes.

Basis	TO BE based on law and regulation	AS IS	Pension fund governance function
IOPS regulation & pension fund governance rules	Mission, vision, strategy	Not available	Careful Management
IOPS regulation & pension fund governance rules	Description of decision-making process	Not available	Careful Management
33 Pension Act: Controlled and sound operations.	A clear and adequate organisational structure.	An organization chart is available.	Careful Management & Openness
33 Pension Act: Controlled and sound operations.	A description of responsibilities of the board (members).	A short description of some responsibilities can be found in the internal control rules.	Careful Management, Accountability & Expertise

Table 5-73: Overview of fundament of decision-making processes.

5.4.6.1 Comparison TO BE and AS IS Phase 1: Availability of Data

Considering the phase of availability of data a clear and adequate division of roles and responsibilities should be organized. Appointments for receiving information considering assets, liabilities and developments are set out in the internal control rules and AOM. From the process perspective, the following differences analysis is drafted. For phase 1: Availability of data the following is established. One should consider that the following pension fund governance

functions are involved: Careful management, accountability, internal supervision, expertise and openness.

TO BE process	AS IS process
1. In the AOM two elements are mentioned. Once a month, a limited overview, and once every three months a comprehensive overview of committed portfolio transactions and investment results. The insurer should make this information available.	1. Information about the assets was available. 2. Information about the liabilities was not available. There is, however, nothing in the AOM or in contractual arrangements with the insurer on the value of the liabilities and reporting thereon.

Table 5-74: Comparison TO BE versus AS IS phase 1.

5.4.6.2 Comparison TO BE and AS IS Phase 2: Awareness

One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise and openness. From the process perspective, the following differences analysis is drafted.

TO BE process	AS IS process
1. No written information about how the process should go or proceed was found in the examined factional documents.	

Table 5-75: Comparison TO BE versus AS IS phase 2.

It seems as if the participating organization did not care about the level of the coverage ratio. This was due to the contract with the insurer. However, even with such a contract, the organization can reach the status to submit a recovery plan to the supervisor.

Although the subject was not on the agenda or as such discussed in board meetings in some of the discussion, it was an associated subject. Decisions about indexation for former participants could only take place when the coverage ratio was above 110%. According to the minutes this subject was discussed in the board meeting of February 5, 2009 (Participating organization # 4, 2009b). In the minutes of the board meeting of September 11, 2008 (Participating organization # 4, 2008f) it is recorded that the coverage ratio is

114. This announcement was part of a discussion about indexation for former participants. In the minutes of the board meeting of the next board meeting (Participating organization # 4, 2008g) a decision is recorded about the indexation together with a breaking story³⁶. Immediately after the meeting, the board decided via e-mail (Participating organization # 4, 2008g) that the higher percentage of indexation applies. As one can read the information about the coverage ratio should be available for making some of the board decisions with financial consequences.

5.4.6.3 Comparison TO BE and AS IS Phase 3: Analysis

One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise and openness. From the process perspective, the following differences analysis is drafted.

TO BE process	AS IS process
	1. The topic coverage ratio is not a fixed agenda issue for the board meeting. During the research period the topic never has been put on the agenda. Due to this fact the entire process did not occur in factional documents.

Table 5-76: Comparison TO BE versus AS IS Phase 3.

5.4.6.4 Comparison TO BE and AS IS Phase 4: Action

One should consider that the following pension fund governance functions are involved: Careful management, accountability, internal supervision, expertise, openness, and communication. From the process perspective, the following differences analysis is drafted.

³⁶ Translated by the researcher: "although the methodology in the memo is correct, there is a mistake in calculating the correct indexation percentage for former participants. It must be higher." PARTICIPATING ORGANIZATION # 4 (2008g) Minutes of pension fund board meeting 16-10-2008. 's-Gravenhage.

TO BE process	AS IS process
	1. The board did not decide.

Table 5-77: Comparison TO BE versus AS IS Phase 4.

On request of the researcher the respondent answered on May 23, 2012 via e-mail that the pension fund is liquidated. All the pension entitlements are transferred to an insurer in a direct insured contract as of January 1, 2012.

5.5 Cross-Case Comparison

In the previous sections of this chapter the empirical data of the different cases were analysed. In this section the cases will be compared.

5.5.1 Comparison of Differences in TO BE Decision-Making Processes

It is established that all cases differ in terms of decision-making processes. They also differ in this research in terms of: number of participants, coverage ratio, board, organization, service providers, and supervision category. Prior to establishing the differences per phase of the research model each participating organization needs to have certain elements in place. This is due to regulation and pension fund governance principles. It is established that none of the participating organizations has an integral policy document in which the mission, vision, and strategy are described. Only participating organization # 3 has some elements described in the Statute. By not having such a document an adequate measuring rod is missing.

Another document which is required (International Organisation of Pension Supervisors, 2006) is a pre- or description of the decision-making process. Such a document has not been drafted by the participating organizations. Due to the fact that it is missing it is possible that the decision-making process consists of chance, subjective reviews and incident control. This is in conflict with regulation and pension fund governance principles. Stewardship should be the core. Hereafter an overview of the TO BE situation will be displayed.

Subject TO BE	Case 1	Case 2	Case 3	Case 4
Phase 1. Does the AOM contain rules about who should deliver what?	YES , about receiving information considering assets. NO about liabilities nothing is described.	YES , about receiving information considering assets and liabilities.	YES , about receiving information considering assets and liabilities.	YES . However it only considers information about assets.
Phase 1. Can the rules in the AOM be interpreted different?	Flexible interpretation is possible.	Flexible interpretation is possible.	There is only one way of explanation possible.	Flexible interpretation is possible.
Phase 1. Are contractual arrangements made with service providers about information delivery?	YES , only about the information considering the assets.	YES.	YES.	YES , only about the information considering the assets.
Phase 3. Is a description of responsibilities of the board (members) regarding the decision-making process in separate document available?	NO , a short description of some responsibilities can be found in the internal control rules.	NO , a short description of some responsibilities can be found in the internal control rules.	YES.	NO , a short description of some responsibilities can be found in the internal control rules.
Phase 3. Is the process about setting up agenda, meeting, recording decisions described?	NO , only in the internal control rules one can find the process description of: setting up agenda. The number of meetings is recorded in the AOM. About recording decisions nothing is described.	Partly , in the internal control rules one can find process description of: Setting up agenda Meeting. About recording decisions nothing is described.	Partly , in the internal control rules one can find process description of: Setting up agenda Meeting. About recording decisions nothing is described.	Partly , in the internal control rules one can find process description of: Setting up agenda Meeting. About recording decisions nothing is described.
Supervisory category	4	2	3	2

Table 5-78: Elements influencing the decision-making process.

5.5.2 Comparison of Differences in AS IS Decision-Making Processes

The next step is to look on an aggregate level at all cases in the AS IS situation, as displayed in Table 5-79.

Subject AS IS	Case 1	Case 2	Case 3	Case 4
Phase 1. Availability of data				
Did the organization receive information about assets?	YES.	YES , but not on time as described in AOM.	YES.	YES , but not on time as described in AOM.
Did the organization receive information about liabilities?	NO.	NO.	YES.	NO.
Phase 2. Awareness				
Did the organization identify the situation as a crisis?	NO. Due to the interest risk hedging strategy	NO.	NO. Due to the interest risk hedging strategy	NO. Due to the insurance contract
Did time constraints or other biases play a role in identifying the situation as crises?	YES	NO	YES	NO
Did politics play a role?	NO	NO	NO	NO
Phase 3: Analysis				
Did the organization follow the agreed procedure/process considering setting up agenda, meeting preparation, recording decisions as described in the internal control rules?	NO.	NO.	YES.	NO.
Phase 4: Action				
Did the board decide on the subject of the coverage ratio?	YES , do not change the current investment strategy	YES , afterwards change the investment strategy	NO.	YES , a decision about indexation.
Supervisory category.	4	2	3	2

Table 5-79: AS IS situation of decision-making.

5.6 Overview of the Collected Facts

The empirical data and the cross case comparison of the TO BE and AS IS situation show a number of elements that are crucial to drawing conclusions. The conceptual research model has made it possible to obtain structured insight in the decision-making process concerning the coverage ratio. By following the model a number of elements for improvement have come to light. To start with the numbers the majority, which is 75%, have an AS IS situation derived from the agendas, minutes, questionnaires, and interviews, which differs from the TO BE situation arising from theory and other documentation. The same percentage did not have information about the liabilities, unlike to what is described in the AOM. The same number did not translate the agreed rules in the AOM into contractual arrangements with the pension administrators. As a consequence no justifiable action could be taken towards the pension administrators (insurers) to receive the missing information in a timely manner. Again, 75% of the participating organizations could not calculate the coverage ratio at all, because information was either missing or incorrect. Taken the previous collected facts into account 75% of the participating organizations were therefore not 'in control' using the definition mentioned in section 2.3.4.7.1. It is amazing to note that 50% of the participating organizations did not take any decision related to the information exchange regarding the coverage ratio. Because the decision-making process is not prescribed it is not surprising that each participating organization follows a different process to come to a decision on the coverage ratio. Agendas and minutes show that the subject of the coverage ratio was discussed by all participating organizations during the study period. However, the reasons for discussion were not related to the actual financial crisis and the consequences for the nominal pension entitlements. The reasons were very different, like: to check and decide whether there was money and/or the obligation to index, or the reports to the supervisor were apparently not correct, or the communication with the (former) participants in the newsletter of the fund was incorrect, or the subject has the attention of one or more board members. There are many differences between each case and a few similarities. The similarities are not connected to the supervisory category.

One of the similarities is that in the preparation of the meeting none of the participating organizations used a checklist to track – in a consistent way – what was necessary to obtain consistent data in relation to the subjects of the agenda.

One of the differences is the way the outsourced tasks are governed. One of the outsourced activities was the government body. The majority of the participating organizations made use of an external government body. In one case the services were strictly regulated, but not controlled at all. In another case the body was involved in the set up of the agenda due to strict regulations, which were controlled. The specific government body contributed to the entire decision-making process in a positive way. In the third case the government body was used as supplier of workforce due to the limited time availability of the board members but not controlled at all.

Reading the numbers 20 - 34% of the given answers in the questionnaires is not identical. One should realize that this number is composed of answers given to different type of questions. The answers given to questions about real figures to calculate the coverage ratio differ from 5% for case # 3 and 60% for case # 2. The other questions are related to the content of the process. Two out of four participating organization were liquidated. This liquidation was due to:

1. Lack of money and instruments to continue existence in one case.
2. Time available for board members.
3. Increasing line drift from the Government and supervisor which makes continuation more complex.

The study showed that the conceptual research model is a useful aid to analyze the decision-making process. And overview of the results is shown in Table 5-80.

Researched items	Phase of conceptual research model	Requirement	Results of participating organizations			
			1	2	3	4
Law		Compliance	NO	NO	YES	NO
Factional documents		Compliance	NO	NO	YES	NO
Mission vision strategy		Pension fund governance	NO	NO	Partly	NO
Able to respond	Availability of data	Compliance & Pension fund governance	NO	NO	YES	NO
Adaptive	Awareness	Compliance & Pension fund governance	YES	YES	YES	NO
Ready to respond	Analysis	Pension fund governance	NO	NO	YES	NO
Action	Action	Pension fund governance	YES	NO	YES	NO
Excellence shortfall			2,800 basis points	2,940 basis points	2,200 basis points	1,070 basis points
Coverage ratio > 105%			YES		YES	
Coverage ratio < 105%				YES		YES
Recovery plan		Compliance	NO	YES	NO	NO, due to its re-insurance

Table 5-80: Overview research results

5.7 Conclusions

Ambachtsheer et al. (1996) showed that the excellence shortfall, among other causes, was caused by the poor decision processes (98%). Dean and Sharfman (1996) showed that the process of decision-making is important and related to the success of a decision. The possible relationships between the

implementation of pension fund governance principles, appropriate decision-making processes and outcome brought the following propositions to be researched:

Proposition P1: The implementation of pension fund governance principles leads to an appropriate decision-making process.

Proposition P2: An appropriate decision-making process leads to a legally required minimum coverage ratio.

Ambachtsheer et al. (1998a) discussed that the decision-making process is part of governance and that there is a correlation between good governance and pension fund excellence. Due to the small sample size of participating organizations in this study, it is impossible to calculate a Pearson's correlation, which is statistically significant. However, when both tests seem to be true after a qualitative analysis it endorses the results of Ambachtsheer.

5.7.1 Research Model

The conceptual research model has made it possible to obtain structured insight in the TO BE and AS IS decision-making process concerning the coverage ratio of all participating organizations and therefore is as such a tested aid to analyze the decision-making processes.

By following the model a number of points for improvement have come to light. The AS IS situation derived from the agendas, minutes, questionnaires, and interview differs from the TO BE situation arising from theory, legislation and other documentation. This counts for cases 1, 2, and 4. For case 3 the TO BE and AS IS situation does not differ. It can be concluded that the research model is an appropriate analysis aid.

5.7.2 Implementation of Pension Fund Governance Principles

The first part of the proposition P1 is about the implementation of pension fund governance principles. Hereafter an overview is given about the way the separate cases dealt with the subject.

Case 1:

1. Principles of pension fund governance are not completely implemented and adhered to.
2. An integral document containing the Mission, Vision and Strategy is missing.
3. The board reports a different coverage ratio than is legally defined.
4. There is a lack of openness and communication among board members and participants (Silence is golden). When unity and responsiveness are low, the information will tend to become compartmentalized and is not shared readily. This is obviously the case in participating organization # 1, because 34% of the given answers of the verified facts are non-identical. In an open organization these facts would be shared, but due to the figure of the non-identical answers this was certainly not the case in the studied organization. This conclusion is supported by the fact that on the basis of a personal interest and coerced by not delivering service providers one of the board members maintained a shadow administration that was not shared with other board members.

Case 2:

1. Principles of pension fund governance are not completely implemented and adhered to.
2. An integral document containing the Mission, Vision and Strategy is missing.
3. The board reports a different coverage ratio than is legally defined.
4. There is a lack of openness and communication among board members and participants (Silence is golden). When unity and responsiveness are low, the information will tend to become compartmentalized and is not shared readily. This is obviously the case in participating organization # 2, because 24% of the given answers of the verified facts are non-identical. In an open

organization these facts would be shared, but due to the figure of the non-identical answers this was certainly not the case in the studied organization. This conclusion is supported by the fact that on the basis of a personal interest and coerced by not delivering service providers one of the board members maintained a shadow administration that was not shared with other board members.

Case 3:

1. Principles of pension fund governance are not completely implemented and adhered to.
2. An integral document containing the Mission, Vision and Strategy is missing. However, elements are found in the Statute of the fund.
3. The complaints committee should be fully independent and not part of the organization
4. There is a lack of openness and communication among board members and participants (Silence is golden). When unity and responsiveness are low, the information will tend to become compartmentalized and is not shared readily. This is obviously the case in participating organization # 3, because 20% of the given answers of the verified facts are non-identical.

Case 4:

1. Principles of pension fund governance are not completely implemented and adhered to.
2. An integral document containing the Mission, Vision and Strategy is missing. However, elements are found in the Statute of the fund.
3. Not all mandatory legal rules are implemented.

5.7.3 Appropriate Decision-Making Process

The second part of P1 is about appropriate decision-making process. Hereafter an overview is given about the way the separate cases dealt with the subject. To start with it must be noted that none of the participating organizations have a document containing a pre- or description or a combination of it of the decision-making processes.

Case 1:

1. During the research period the decision-makers were not able to respond. However, they were adaptive to the situation to a certain extent. The decisions made were based on personal views, and not on facts and agreed procedures.
2. During the meeting of March 9, 2012 it is stressed that from 2010 onwards the entire process of decision-making was adjusted. So there are changes made to:
 - a. Report formats,
 - b. Recording of decisions.

Case 2:

1. During the research period the decision-makers were not able to respond. However, they were adaptive to the situation to a certain extent. The decisions made were based on personal views, and not on facts and agreed procedures.
2. The difference between the AS IS and TO BE situation described delivers decisions regarding the coverage ratio, which are not based on verified facts and are therefore undesirable.

Case 3:

1. The facts show that the board was in control. This means: they were able to respond because the information was available, adaptive to the situation because coverage ratio was a regular agenda item for the board, ready to respond because they discussed the investment policy.
2. Although there is no difference between the TO BE as described and AS IS situation, by putting the subject of coverage ratio under notices on the agenda of the board, the subject cannot be prepared and properly discussed.

Case 4:

1. The fund was not able, adaptive and ready to respond the situation.
2. Discussing a subject (coverage ratio) without having the correct information available can lead to incorrect decisions, which is what happened. The decision about the indexation needed correction.

5.7.4 Conclusion Proposition 1

The above given facts endorse the proposition that there is a positive relationship between good pension fund governance implementation and appropriate decision-making processes. Cases 1, 2, and 4 show that improvement of the implementation of pension fund governance principles and measures are necessary and that the decision-making processes are not appropriate. Case 3 is the positive confirmation of this proposition. The implementation of pension fund governance principles and measures is relatively well established and the decision-making process is appropriate. Taking this into account the conclusion is that proposition P1: The implementation of pension fund governance principles leads to an appropriate decision-making process is true.

5.7.5 Coverage Ratio

For an answer to the second proposition P2: An appropriate decision-making process leads to a legally required minimum coverage ratio the facts about the coverage ratio need to be established. Hereafter an overview of the facts is displayed.

Case 1:

1. There is an excellence shortfall, because:
 - a. Coverage ratio according to the annual report 2007 is 144%.
 - b. Coverage ratio according to the annual report 2008 is 116%.
 - c. The established excellence shortfall is 2,800 basis point per annum.

2. In the annual report 6 different coverage ratios are published. None of these corresponds to the legally prescribed calculation method. However, the auditor apparently approves this. The added value of the publication of the different calculated coverage ratios is neither explained in fictional documents or year report.
3. The participating organization needed to draw up a recovery plan (recovery within 15 years) because the fund it had a reserve deficit. (see 2.3.4.4.5)

Case 2

1. There is an excellence shortfall, because:
 - a. Coverage ratio according to the annual report 2007 is 131.1%.
 - b. Coverage ratio according to the annual report 2008 is 101.7%.
 - c. The established excellence shortfall is 2,940 basis point per annum.
2. In the annual report 3 different coverage ratios are published. None of these corresponds to the legally prescribed calculation method. However, the auditor apparently approves this. The added value of the publication of the different calculated coverage ratios is neither explained in fictional documents or year report.
3. It was needed to draw up a recovery plan because it did not meet the minimum required regulatory own funds (see 2.3.4.4.4). The fund had a so called funding shortfall

Case 3

1. There is an excellence shortfall, because:
 - a. Coverage ratio according to the annual report 2007 is 149.6%.
 - b. Coverage ratio according to the annual report 2008 is 127.6%.
 - c. The established excellence shortfall is 2,200 basis point per annum.
2. In the annual report 1 coverage ratio is published which corresponds to the legally prescribed calculation method.
3. The coverage ratio is the highest one of the participating organizations. It is even beyond the legally required funds (No funding shortfall or reserve deficit. Due to the hedging strategy the risk was mitigated to a maximum which caused a lower required fund surplus. Therefore, although the fund did not reach the 130% a recovery plan was not needed.)

Case 4

1. There is an excellence shortfall, because:
 - a. Coverage ratio according to the annual report 2007 is 112.8%.
 - b. Coverage ratio according to the annual report 2008 is 102.1%.
 - c. The established excellence shortfall is 1,070 basis point per annum.
2. In the annual report 5 different coverage ratios are published. One of these corresponds to the legally prescribed calculation method. However, the auditor apparently approves this. The added value of the publication of the different calculated coverage ratios is neither explained in factional documents or year report.
3. It was needed to draw up a recovery plan because it did not meet the minimum required regulatory own funds (see 2.3.4.4.4). The fund had a so called funding shortfall. However this call to draw up a recovery plan was adjusted because the fund was fully re-insured. Still the fund had the lowest coverage ratio of all participating funds.

5.7.6 Conclusion Proposition 2

Taking this into account the conclusion is that proposition P2: The implementation of pension fund governance principles leads to an appropriate decision-making process is true.

The above given facts endorse the proposition that there is a positive relationship between appropriate decision-making processes and minimum required coverage ratio. Cases 1, 2, and 4 show that a recovery plan was required due to a funding shortfall or a reserve deficit. Case 3 again is the positive confirmation of this proposition. The fund had an appropriate decision-making process and a recovery plan was not required. There were two variables influencing the coverage ratio. The first one is the appropriate decision-making process and the second one is the financial crisis. Knowing that an average fall of coverage ratio of 4,900 basis points took place (see section 1.1.1) the participating organizations had a fall of less basis points but still significant. The limitation of the fall could be caused by the hedging policy of the participating funds. Case 3, which exercised the decision of a 100% hedging strategy of the liabilities, had the highest coverage ratio of the

participating organizations during and after the research period. Case 3 also had an appropriate decision-making process. Therefore it can be assumed that an appropriate decision-making process leads to a minimum required coverage ratio. To research for generalisation of the second proposition a larger sample size is necessary. Such a sample size can possibly proof statistical significance of the relationship. However, then a very clear definition of excellence shortfall should be established. This study based on the qualitative analysis showed the positive relationship between the implementation of pension fund governance principles and an appropriate decision-making process. The other proposition that an appropriate decision-making processes leads to a minimum required coverage ratio is also endorsed.

6. Summary, Conclusions and Recommendations

6.1 Introduction

At this point the research objective and the research question as mentioned in Chapter 1 should be answered. Consequently, this chapter will highlight the contributions of this research to management and academia. In addition, suggestions for future research will be given.

The success of this research was the exceptional granting of access to four cases. Lack of such access could very well be the reason why research of this nature has not been previously achieved. The Dutch association of company pension funds was asked to help the project to succeed. They could do so by writing a letter of recommendation for their members. Finally they did not want to encourage funds to participate because the research project would focus on a 'delicate' matter. After an intensive exercise it was feasible to contact 22 company pension funds. Despite these contacts, the question to cooperate in the research project was often answered negatively. Of the group of 22 pension funds, 10 pension funds immediately refused their cooperation. A group of eight pension funds, which were asked to participate and initially verbally agreed, refused in a later stage when asked to confirm their participation in writing. Ultimately, four company pension funds agreed to participate of which two needed to submit a legally required recovery plan to the supervisor.

In 2012 and 2013 prof dr. H.M. Prast (2013) had the same difficulty of getting access to data. Prast and one of her students found that it was not easy to receive information from pension funds about the administrative burden of mandatory information. Quite a few funds did not want or could cooperate. The communicated reasons were that they had the numbers not available, or because they had to give priority to other issues. Prast gave this information during a radio interview.

6.2 Conclusion

This study revealed that, based on a small sample, in empirical terms there are no differences between participating Dutch Company pension funds regarding their desire to decide. Decision-making seems to be the core business for participating organizations, although during the research period:

1. Three out of four did not follow the agreed procedures.
2. Three out of four pension funds did not have the proper information available to decide.
3. The cognition was not distributed. Between 20-34% of given answers were non-identical.
4. The boards did not have a document containing the mission, vision and strategy leaving a proper measuring rod missing.
5. None of the participating organizations had a document containing a description of the decision-making processes.

The study established that three out of four participating organizations did not implement and live up to good pension fund governance principles. To achieve that goal professional boards and processes are necessary. The behaviour of board members is comparable, regardless of whether there is accurate information available. It looks like there is a widespread passion to decide. Although large sums of money (€ 30 million - € 1,440 million: median € 251 million and mean € 493 million) are managed by each participating fund, it seems as if the management of the funds, and also the government bodies are lost in very well-meaning measures, but a professionally arbitrary approach. This is a serious matter, which is also acknowledged³⁷ by the supervisor in their report (2012c).

The Minister of Social Affairs and Employment intends to adapt the Pension Act, as the current situation will otherwise continue with all the negative consequences. The recommendations can help to minimize the consequences

³⁷ Translated by researcher: "pension fund governance in 2012 is almost a day's work. The legislator, the supervisors, and the (former) participants all set high demands on pension fund governance." DE NEDERLANDSCHE BANK (2012d: 8) Eindrapport themaonderzoek goed Pensioenfondsbestuur 2011. Amsterdam.

of this “decision-making desire”. It is necessary to conduct further research on decision-making in Dutch company pension funds because pensions as a topic has the strong interest of participants who pay pension premium, former participants who have paid premium and retirees who receive pension. Also there are a number of developments like the possible introduction of Solvency II, which may have implications for the administrators of the money: the pension funds and insurers. Currently Solvency II set the standard for the solvency buffer of insurers in the same way as Basel III does for banks. Solvency II requires a security standard of 99.5% for insurers. When Solvency II or an equivalent is implemented for pension funds the solvency buffers need to be changed. At present in the Netherlands the security standard is 97.5% for pension funds. This possible new security standard of 99.5% means 3 billion Euro additional pension premium according to the Dutch Government. To conclude, it appears that analyzing decision-making processes by using the (tailor-made) conceptual research model and taking action on the found mismatches could lead to an appropriate decision-making process which could lead to good pension fund governance and better performance.

6.2.1 Conclusion Proposition 1

The facts (see 5.7) endorse the proposition that there is a positive relationship between good pension fund governance implementation and appropriate decision-making processes. Cases 1, 2, and 4 show that improvement of the implementation of pension fund governance principles and measures are necessary and that the decision-making processes are not appropriate. Case 3 is the positive confirmation of this proposition. The implementation of pension fund governance principles and measures is relatively well established and the decision-making process is appropriate. Taking this into account the conclusion is that proposition P1: The implementation of pension fund governance principles leads to an appropriate decision-making process is true.

6.2.2 Conclusion Proposition 2

The facts (see 5.7) endorse the proposition that there is a positive relationship between appropriate decision-making processes and minimum required coverage ratio. Cases 1, 2, and 4 show that a recovery plan was required due to a funding shortfall or a reserve deficit. Case 3 again is the positive confirmation of this proposition. The fund had an appropriate decision-making process and a recovery plan was not required. Obviously there were two variables influencing the coverage ratio. The first one is the appropriate decision-making process and the second one is the financial crisis. Knowing that an average fall of coverage ratio of 4,900 basis points took place (see section 1.1.1) the participating organizations had a fall of less basis points but still significant. The limitation of the fall could be caused by the hedging policy of the participating funds. Case 3, which exercised the decision of a 100% hedging strategy of the liabilities, had the highest coverage ratio of the participating organizations during and after the research period. Case 3 also had an appropriate decision-making process. To research for generalization of the second proposition a larger sample size is necessary. Such a sample size can possibly proof statistical significance of the relationship. This study based on the qualitative analysis showed the positive relationship between the implementation of pension fund governance principles and an appropriate decision-making process. The other proposition that an appropriate decision-making processes leads to a minimum required coverage ratio is also endorsed.

6.3 Summary

The research objective - development of a decision-making process model for appropriate decision-making within pension funds - has been established. The development clearly had the characteristics of a division in two stages. It started with general decision-making literature, which was then completed with sector-specific aspects. The conditions were taken from research (Ambachtsheer et al., 1996, 2006, 2007, Capelle et al., 2008, Stewart and Yermo, 2008) law (Minister van Sociale Zaken en Werkgelegenheid, 2006), factional documents

(e.g. Statute, AOM), and pension fund governance principles (Vereniging van Bedrijfstakpensioenfondsen, 2006, Stichting van de Arbeid, 2005).

In line with the objective and the propositions of the study quantitative and qualitative methodologies were used and are presented in Chapter 4. The findings, which emerged, prepared the grounds for the conclusion and recommendations in this chapter. The recommendations are based on the confrontation between the conceptual research model and the obtained empirical information.

The proposition that the implementation of pension fund governance principles leads to an appropriate decision-making process is confirmed in the conducted case studies. The second proposition that an appropriate decision-making process and minimum required coverage ratio, appears to hold as well.

6.4 *Discussion of the Research Model*

It must be noted that the objective of the study was met. The model has proved its value as a screening/analyzing instrument, and it revealed that:

1. The received data was useful and showed the internal process and discussion.
2. There were no positive or negative differences in the received data, which attracted special attention. Respondents did not make any written comments regarding the questionnaires.
3. The model is an aid to analyze the decision-making process. By doing so, it shed a light on shortcomings in the implementation of pension fund governance principles. Pension fund governance principles are key for the success of decisions. The model tests all pension fund governance functions like careful management, accountability, internal supervision, expertise, openness, and communication. Shortcomings like proper risk management, openness, and communication can then get the necessary attention. If the decision-making process according to the research model is all set, the reviewed pension fund governance functions are all set as well due to the proven relationship. As a consequence the board will be 'in control' and

therefore it is very likely that there will be a greater change to achieve a sufficient coverage ratio.

4. The research showed that the research model enabled the researcher to create a view on the decision-making process. The model certainly indicates the issues, which are vital for the decision-making process. To this end it has proved to be a good and useable analysis aid.

However the model could be enhanced. When improving the conceptual research model to become a heuristic model to assess the quality of decision-making in pension funds it should be enhanced. This can be achieved by the following topics.

1. A missing issue is politics in the decision-making process. During the research, politics was not included in the questionnaire and the model. The reason for this was that the situation was not seen as a crisis by the participating organizations. A study by Papadakis and Lioukas (1996) claimed that crisis situations seem to affect the decision-making process differently than pressure situations. Crisis situations trigger internal political activities during the decision-making process. Decisions posing pressure seem to be subjected to the formal rules. The struggle for power and the use of politics is more applicable in day-to-day decision-making processes. Therefore it might be recommendable to insert the issue.
2. Another possible improvement would be the use of a digital version. During the research it became clear that using the model and filling out the questionnaires takes time. The respondents do not see immediately the results of their given answers and the possible conflicts with answers given by other board members. When this could be the case it can introduce the necessity to consult the other board members and so to learn from each other. However, this improvement also needs a different way of organizing, because it is feasible that such a version stifles participation. Conflicts will become very obvious
3. A top end solution would be a digital version with a dashboard, which shows in the specific decision-making process, whether the information that is given as an answer by the respondent is in line with law and the factional documents.

Due to the fact that the conceptual research model makes it feasible to shed light on the implementation of good pension fund governance principles and decision-making process, this is a contribution to the current gap in research. The conceptual research model together with its questionnaire can also be used in other countries as well to shed light on possible mismatches. Obviously the implementation of pension fund governance and decision-making processes are a worldwide issue. This study and the conceptual research model make it feasible for other pension funds in the Netherlands and elsewhere to analyze their decision-making process. However, it should be tailored to the applicable law and content of the factional documents.

6.5 Recommendations

The recommendations of the research are grouped under managerial and theoretical implications.

6.5.1 Theoretical Contribution

Using the developed conceptual research model elements came to light in a structured way. The research conducted in this study was limited for several reasons. Those limitations warrant attention. These limitations also provide fertile ground for future research. This study adds to a growing body of research (Tuggle et al., 2010, Westphal and Khanna, 2003) on the inner working of boards and decision-making processes. There was no empirical research on decision-making processes within Dutch company pension funds or into the manner in which pension funds arrive at appropriate decisions. This is in part due to difficulties in garnering access to boards and collecting data on decision-making processes within pension fund boards.

1. Longitudinal research “decision-making need”.

The constructed validity in this research could not be enhanced therefore new research should be undertaken. This new research should use a larger sample and test (both qualitatively and quantitatively) the conceptual research model.

The external validity makes it possible to generalize the study's findings and should incorporate a longitudinal design.

2. Research into careless management.

At present there are four different variables showing, that there could be something wrong in the process of decision-making by board of pension funds that seems to cause careless management. Careless management is the opposite of careful management which is one of The four 'Principles for good pension fund governance' (Stichting van de Arbeid, 2005).

1. Collected facts for this thesis showing that 75% of the participating organizations did not implement 'Principles for good pension fund governance' lived by those principles and acted when and if necessary.
2. In a national newspaper an article (Pijpker, 2012) with an intriguing headline appeared³⁸. After a year research carried out by a forensic accountancy agency they established, that:
 - a. Reports of meetings and decisions were often incomplete, or incorrect, or even lacked.
 - b. Money was moved around in the balance sheet or even disappeared.
3. After examining decision-making process of six pension funds the supervisor reported in the final report management effectiveness (De Nederlandsche Bank, 2012b) that some funds have gotten a command to improve the decision-making process.
4. Webpage of a pension magazine (Preesman, 2012) that states that the Dutch supervisor has concluded a specific pension fund was insufficiently in control.

The four mentioned indicators could possibly be enough for suggesting a sector wide research project. It seems possible that more funds acted carelessly. This may have played a role in the decision of pension funds (afterwards) not to participate in this research.

³⁸ Translated by researcher: Pension fund CBR careless managed. PIJPKER, J. (2012: 1) 'Pensioenfondsen CBR onzorgvuldig geleid'. *Volkskrant*.

3. Develop templates for ideal board composition.

An appraisal of the professional capabilities, experience and behaviour of the board members of Dutch company pension funds should be conducted to evaluate the training needs and requirements of the board members. Although research within Dutch pension fund boards (Veltrop et al., 2012) has shown that reflection has a positive contribution on board functioning, reflection alone is not enough. It is possible that board members will not confirm that they are not experienced or lacking professional capabilities on a board level. Since 2012 the supervisor monitors the appointment of board members (De Nederlandsche Bank and Stichting Autoriteit Financiële Markten, 2012). If the proposed board member does not meet the unknown criteria of the supervisor the appointment should not be approved. Since the beginning of 2013 25% of the re-appointments did not go through because the supervisor considered they did not meet the requirements of suitability and/or expertise. If templates are developed and integrated into the actual selection process it could reduce or even eliminate the current practice of rejection by the supervisor.

6.5.2 Managerial Contribution

6.5.2.1 1st Level: Participating organizations

Based on the fact that the majority of participating funds did not act on the issues which were in their sphere of influence, they should consider acting in the future when and if necessary. If they do, then they could get 'in control' (Pensioenfederatie, 2010). This can be achieved by dividing the actions in process and content actions. After conducting, well informed and confirmed decisions, action becomes a core line in business. The proposed process actions are:

1. Check the decision-making processes.

To determine whether a board is infected with the passion to decide the fund or supervisor can make use of the research model, which can provide an overview of the TO BE and AS IS situation. The check shed a light on the implementation

of the pension fund governance principles. Improvements can be made in line with the model and the established deviations.

2. Create a description of the decision-making process as it is.

Obviously pension fund board members change over time. Therefore it is a translation of good pension fund governance principle and focused primarily on careful-management to have a process description available. This makes the decision-making process predictable and is also known what to do in times of crisis.

3. Make use of checklists as an aid for the AS-IS description.

One of the improvements is the use of decision-making checklists to prevent accidents from happening by decisions that are based on non-traceable information.

4. Pay attention to outsourcing.

In the TO BE and AS-IS situation the participating funds should pay adequate attention to the outsourcing of services to third parties. Apparently, however, funds establish rules, but do not check their own compliancy with these rules. Perhaps there is something to gain in changing policy, from control in terms of ticking the boxes to becoming a director in the process of information exchange.

5. Change the staffing of the current (internal) supervisory function.

The Review Committee or the Accountability body should have observed that decisions regarding the coverage ratio were not based on proper information. However, nothing in the empirical data proves that the Review Committee or the Accountability body recognized this problem. It would be beneficial to encourage the supervisory committees to do their work. This calls for fully independent and newly staffed Review Committees, which would review the board and Accountability body's work yearly. One should bear in mind, based on the empirical data in this study that the monitor and supervisory role seem to be not strongly developed by those who exercise this today. The minutes of the review committees of the participating organizations showed that none of the committees reviewed the decision-making processes or established that

decisions were taken without the proper information available. After implementing these measures, it is feasible that the funds will have achieved process control. The next phase for the participating organizations should be focussed on enhancing the governance, by focussing on the content.

6. Mission, vision, strategy note.

It is established that it is impossible to check whether the consequences of the decisions meet the standards, because there are none. A document in which the mission, vision, and strategy are recorded is therefore a big step forward. Without such a document it is difficult – if not impossible - to manage or to judge the decision. The ‘need to decide’ could be traced back to that document. It is important that given the avalanche of activities of which the execution is compulsory or not, the fund can set priorities. The often-missing policy document can have an added value in the process of setting priorities. Another added value of such a document is that decisions around terms such as risk, risk perception, and scenarios could be then traced back and related to the targets mentioned in such a document. Therefore it is recommended for the participating organizations to draw up a document with the mission, vision, and strategy of the pension fund.

7. Professionalization of the board.

Due to the limited time available for board members to act as such and increasing complexity it is recommended to appoint one or more professional managers as member of the board.

6.5.2.2 2nd Level: Outside world

A number of funds refused to cooperate. It appears that, there is an unfounded fear for openness. Indeed, some boards perform better than others. This fact emphasizes the pension fund sector’s need to share ‘best practices’, stimulate an attitude of openness and share achieved successes. This can be established by breaking up the ‘closed attitude’ and reticence of pension funds, in order to make it possible for them to learn, develop and take responsibility.

This can be achieved by means of roundtable conversations led by independent third parties, because they can act as independent moderator.

If the participating organizations agree (British Sociological Association, 2002), there is the intention to organize a meeting to disclose the limited research results so that the lessons to be learned can be shared.

6.5.2.3 3rd Level: Dutch supervisor DNB

It is recommended for the supervisor to go back to supervision. That is: *supervision at arm's length*. It is established that Government and the supervisor - based on the dissatisfying situation and other triggers - with a very high frequency distributed new regulations and tightened supervision. This increasing load of attention and mandatory actions is for the participating organizations seen as unwanted meddling. With the current avalanche of requirements to be met by pension funds, the supervisor is involved in the decision-making process. This involvement increases complexity. When complexity increases people are tending to avoid risks and therefore tick the boxes. Research (Gigenrenzer and Kurzenhäuser, 2005) has proven this. To avoid the risks and tick the boxes instead people are focused on the fine print at the expense of the bigger picture. All the interviews show that pension funds and their board members do not want to be in the spotlight of the supervisor. They conduct whatever is required. They tick the boxes. However, the supervisor should not get involved in the decision-making process but should stay at a distance monitoring. In short, place the responsibility and accountability where it belongs and act accordingly. This complies with the spirit of the Pension Act, which is liberal of intent. Much freedom is given to the performers themselves to translate legislation to the "own" local situation. However, due to the previous mentioned measures and timescales, at present freedom is increasingly curtailed freedom.

7. Final Reflection and Discussion

7.1 Introduction

Ambachtsheer et al. (1996) reported the following causes for excellence shortfall: poor decision-making process (98%); inadequate resources (48%) and lack of focus or mission clarity (42%). Ambachtsheer et al. (1998) found that there is a correlation between good governance and fund excellence. This study researched two propositions in which the relationship between the implementation of good pension fund governance and appropriate decision-making process and between appropriate decision-making process and coverage ratio. Both propositions were endorsed. This research covered a period of approximately four years ago. As a consequence, quite some time has passed between the time of data collection and the time of the publication of this research. Therefore, it is good to highlight the present situation and determine whether the research model still can be used as an analysis aid. So the questions are:

1. Is the coverage ratio still an issue for pension funds? In this context the minimum coverage ratio can be seen as the definition of pension fund excellence.
2. Is the lack of focus or clarity of mission still an issue?

7.2 Are Measures Taken?

7.2.1 Position Dutch Supervisor

The Dutch supervisor (DNB) plays a very active role in trying to maintain and adapt a supervisory framework that is crisis resistant. The process of direct response and continuously interactive formulation of new policies by the supervisor has caused the supervisor and its measures to become part of 'risk management' and the corresponding decision-making process. Additionally, even if a document in which the mission, vision and strategy would be

available, pension fund boards would not be able to keep up with the continuous changing 'regulation'. Another consequence is that the supervisor also loses his position of 'supervising at arm's length' strength, as it becomes part of the decision-making process.

Stiglitz (1998) calls this process of Government or supervision becoming part of the process 'Capture'. As a result of interactive, fast changing supervision, most pension fund boards have or see no other option than to 'adapt to regulation only', thus defining 'minimum regulation risk parameters' implicitly and unintentionally as their own 'risk appetite'. As a result, these boards exhibit unintentional 'herd behavior' on supervisory compliancy instead of being independent, responsible (ownership), and accountable for their own actions. The research model can shed light on shortcomings of pension fund governance principles such as careful management.

7.2.2 Is the Coverage Ratio Still an Issue for Pension Funds?

This was the first question raised in section 7.1. To answer this question one should look at information made available by DNB (De Nederlandsche Bank, 2012a). The following Tables 7-1 – 7-3 show the progress of the estimated coverage ratio during the study period and the 2nd quarter 2012 per supervisory category. The first table provides the information of the company pension funds of the supervisory category number two. Those pension funds have an actuarial reserve of more than € 10 million and less than € 100 million. Two participating organizations were in this category.

Coverage ratio	2008 Q 3		2008 Q4		2009 Q1		2012 Q2	
	nr	%	nr	%	nr	%	nr	%
< 105%	19	12%	113	73%	117	81%	57	85%
105-130%	118	73%	32	21%	20	14%	5	7,5%
> 130%	25	15%	9	6%	8	5%	5	7,5%
TOTAL	162	100%	154	100%	145	100%	67	100%
Average coverage ratio	120%		102%		99%		101%	

Table 7-1: Coverage ratio supervisory category II (source: DNB:

<http://www.statistics.dnb.nl/index.cgi?lang=nl&todo=Pen2>; accessed September 14, 2012)

Table 7-1 shows two things. Firstly, from the study period up to and including Q2 2012 the coverage ratio for the majority of company funds in this supervisory category has not been above the legally required 105%. The average did not reach the required 105%. Secondly the number of company pension funds in this category is reduced from 162 to 67, which is a reduction of 95 pension funds, or 59%. Also the two cases in this study of this specific supervisory category do not exist any longer. Hence, the fall of the number cannot be researched any longer. However, DNB possesses data revealing the causes for the disappearance. During a congress (Dahmeijer, 2011) in August 2011 a number of 376 remaining pension funds per June 2011 was called on behalf of DNB. Per June 2012 there are 317 pension funds. DNB has determined that for practical reasons usually reinsured funds that consolidate the same insurer remain. Acquisitions and offshoots of affiliated companies as well as typically determine the choice for liquidations at self-administering funds by limited financial possibilities. Clustering of affiliated companies drives merges between pension funds. Other reasons for the reduction of the number of company pension funds can be lack of knowledge, cost, and complexity. In a study (Bikker and de Dreu, 2006) the impact of scale, governance and plan design were researched. The study found that economies of scale dominate the strong dispersion in both administrative and investment costs across pension funds. These costs are important because they reduce the rate of return on the

investments of pension funds and consequently raise the cost of retirement security. However, the reasons are not fundamentally researched, but what is known is that the supervisor considers this category to actually have no *raison d'être*.

In Table 7-2 one can see the result for supervisory category number three. Those funds have an actuarial reserve of € 100 million or more, but less than € 1,000 million.

Coverage ratio	2008 Q 3		2008 Q4		2009 Q1		2012 Q2	
	nr	%	nr	%	nr	%	nr	%
< 105%	25	15%	134	78%	148	87%	146	87%
105-130%	122	71%	36	21%	23	13%	22	13%
> 130%	24	14%	1	1%	0	0%	0	0
TOTAL	171	100%	171	100%	171	100%	168	100%
Average coverage ratio	118%		98%		95%		95%	

Table 7-2: Coverage ratio supervisory category III (source: DNB:

<http://www.statistics.dnb.nl/index.cgi?lang=nl&todo=Pen2>; accessed September 14, 2012)

Table 7-2 shows that from the end of the period of data collection in Q1 2009 to Q1 2012 the coverage ratio for the majority of company pension funds in this supervisory category has not been above the legally required 105%, nor did the average coverage ratio reach the required percentage. One participating organization is part of this supervisory category and did fulfill the requirements regarding the coverage ratio.

In Table 7-3 one can see the results for supervisory category number four. Those funds have an actuarial reserve of € 1,000 million or more but less than € 5,000 million.

Coverage ratio	2008 Q 3		2008 Q4		2009 Q1		2012 Q2	
	nr	%	nr	%	nr	%	nr	%
< 105%	3	8%	25	66%	29	74%	37	82%
105-130%	29	76%	12	31%	9	23%	8	18%
> 130%	6	16%	1	3%	1	3%	0	0%
TOTAL	38	100%	38	100%	39	100%	45	100%
Average coverage ratio	125%		102%		99%		98%	

Table 7-3: Coverage ratio supervisory category IV (source: DNB:

<http://www.statistics.dnb.nl/index.cgi?lang=nl&todo=Pen2>; accessed September 14, 2012)

Table 7-3 shows that from the end of the research period in Q1 2009, up to and including Q2 2012, the coverage ratio for the majority of company funds in this supervisory category has not been above the legally required 105%. The average coverage ratio in the period between the time in which the research



was conducted, and the present, did not reach the required 105%. To come to a conclusion, one can state that the coverage ratio is certainly a topic, which has become an issue, and should be addressed and handled carefully. This counts for every supervisory category, and every company pension fund. Therefore the conceptual research model can

Figure 7-1: Coverage ratio

of use for researching the decision-making process regarding the coverage ratio to enhance the decision-making quality and achieve the required pension fund excellence.

7.2.3 Mission, Vision and Strategy

Ambachtsheer et al. (2005) established that 42% of the responders in his study indicated the lack of focus or clear mission as the cause of shortfall of excellence. This study has shown that only one participating organization in

their Statute had described some elements of a mission, vision, and strategy. This lack is confirmed through the report of DNB (De Nederlandsche Bank, 2012d). In that report it is established that the majority of the funds do not work on the basis of a mission, vision, strategy document or policy note. For the TO BE situation every pension fund should have such a document. Here to plead for is based on different causes. To mention a few: If there is such a document, a number of topics should have gained attention, direction would have been given already, and actions can be derived from it. For instance determining the asset allocation strategy is the most important decision in the investment process. Setting the optimal allocation strategy involves two decisions (de Dreu and Bikker, 2012). First, the level of risk preference or the risk appetite must be determined in line with the funding ratio and preferences of pension scheme participants and the sponsoring company. Second, the allocation of investments to different asset classes should be chosen to maximize expected returns, given a fund's liabilities and its risk appetite. The actions can also be translated into the governance measures, compliancy, and control. One problem is that as interest rates, volatility and returns currently are in extreme situations even embedded options may play a role. This may be thought to indexation priority for beneficiaries above former or active participants. If those situations exist these should be described in the AOM (Actuarial and Operating Memorandum). Then it will be part of the decision-making process. Without this structure, all the measures were and apparently are a number of chaotic actions. Direction by the board means anticipating and working in line with a mission, vision, and strategy of the fund. The research model can shed light on shortcomings of which the lack of a mission, vision, strategy is one.

7.3 Other Elements Affecting Pension Fund Excellence

There is still a stack of rules that must be met by funds. To mention a few:

1. Law strengthening governance pension funds' (Minister van Sociale Zaken en Werkgelegenheid, 2012b). The law encompasses a number of provisions aimed at strengthening the expertise including the composition of the board and internal monitoring.

Temporary adjustment of the interest rate. On February 3, 2012 DNB decided to apply a correction on the forward rate structure at the end of the year 2011. Although it is a provisional measure, by entering a three months average for the discount rate, supervision becomes part of the risk management and so of the decision-making process.

2. Temporary maximizing pension entitlements discounts. A large number of pension funds announced a hefty pension discount in May 2012. Into consideration the macro-economic effects, DNB has, in consultation with the Ministry of Social Affairs and Employment, decided that in principle pension funds may maximize discount to 7% per April 1, 2013. If a lower discount is necessary.
3. Change of the current FTK. In May 2012 the Minister of Social Affairs and Employment (Minister van Sociale Zaken en Werkgelegenheid, 2012a) sent the main lines note of the revision of the Financial Assessment Framework (FTK) to parliament.
4. Risk management. In December 2011 (De Nederlandsche Bank, 2011a) DNB had the policy "Financial Crisis Plan" drawn up to oblige pension funds to draw up a financial crisis plan as part of the AOM. DNB assumes that by May 1, 2012 all funds have such a plan.
5. New supervision approach. The DNB works with effect from 2012 with a renewed supervisory approach: FOCUS (De Nederlandsche Bank, 2012e). The focus of monitoring was formerly not only focused on individual institutions, but it also encompasses a (too) strong focus on quantitative criteria like solvency and liquidity. These criteria remain important, but effective supervision also requires attention to strategic and qualitative aspects. Risk analysis and mitigation are the pillars of the renewed oversight.

However, when the failure of the funds to establish a sufficient coverage ratio is treated with addressing the core and get to the bottom of this it would reflect more understanding of the issues the funds are facing. The focus should be on implementing good pension fund governance. Using the research model could help checking the actual implementation. By the wide variety in size of the funds, numbers of participants, age of participants, pension scheme and so on,

customization is needed. If funds check according to the conceptual research model what the shortcomings are, the implementation of good pension fund governance principles could be customized. As a consequence the decision-making processes would be adjusted leading to an improved process with qualitative better decisions. Higher quality decisions can contribute to bring or maintain the level of the coverage ratio at a sufficient level.

7.4 *What is Missing?*

Although there are measures taken, the question remains open what is missing? Apparently, the legislator and supervisor are fully focused on complementing existing rules with all sorts of new rules. The current status of the law, which is principle based instead of rule based, is obviously not delivering what it should do. The freedom of the funds is comprised more and more. Nevertheless, there is one element that cannot be solved by legislation or regulation solely. That element is: Openness.

Pension funds as separate entities and as sector are very closed (Silence is golden). To obtain the feasibility to learn more, openness should be very welcome. Therefore new mainline supervisory measures should facilitate and force the breaking up of this 'closed attitude' and reticence, in order to make it possible for pension fund boards to learn, develop, and take responsibility. Of course, some boards perform better than others. This fact emphasizes the pension fund sector's need to share 'best practices', stimulate an attitude of openness, and share achieved successes.

I trust this research will contribute to a more appropriate decision-making process within pension funds, which is in the interest of ultimately of pension fund participants.

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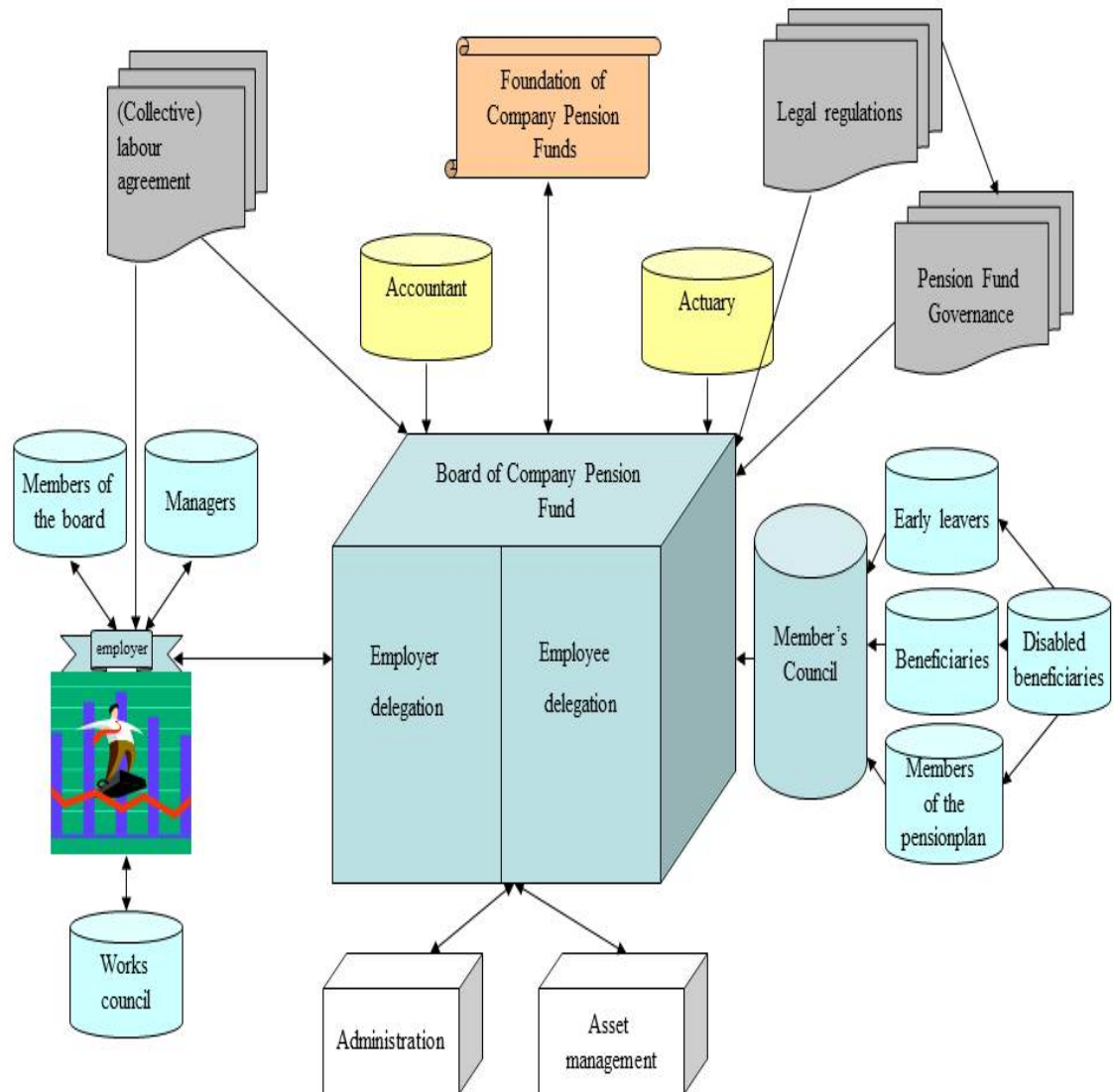
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Appendix A. Stakeholders Dutch Company Pension Funds

Decision making unit and stakeholders company pension fund



Arie Slottje, May 04, 2012

Appendix B. Profiles of National Pension Systems

(source: OECD (2011) Pension at a Glance 2011: Retirement-income Systems in OECD and G20 Countries.)

Pension systems in 2008.

Australia

Australia's retirement income system has three components: a means tested Age Pension funded through general taxation revenue; the superannuation guarantee, a compulsory employer contribution to private superannuation savings; and voluntary superannuation contributions and other private savings, which are encouraged to support self provision in retirement.

Austria

The pension system consists of a defined-benefit public scheme with an income-tested top-up for low-income pensioners.

Belgium

The pension system has two components: an earnings-related public scheme with a minimum pension and a means-tested safety net.

Canada

The pension system offers a universal flat-rate benefit, which can be topped up with an income-tested benefit, and earnings-related public schemes.

Chile

The pension system has three components: a redistributive first tier, a second tier of mandatory individual accounts and a voluntary third tier. The individual accounts, introduced in 1981, are of the defined-contribution type. The redistributive first tier was substantially extended in a pension reform in 2008.

Czech Republic

The public pension scheme has a basic element and an earnings-related part calculated according to a progressive formula.

Denmark

There is a public basic scheme. A means-tested supplementary pension benefit is paid to the financially most disadvantaged pensioners. There is also a scheme based on individuals' contribution records, viz. the ATP. In addition, compulsory occupational schemes negotiated as part of collective agreements cover about 90% of full-time employees.

Estonia

The system combines an earnings-related public scheme with mandatory contributions to funded pensions. There is also a flat-rate, basic element and a safety-net, national pension.

Finland

There is a basic state pension (national pension), which is income-tested, and a range of statutory earnings-related schemes, with very similar rules for different groups. The schemes for private-sector employees are partially pre-funded while the public-sector schemes are pay-as-you-go financed (with buffer funds to even out future increases in pension contributions).

France

In the private sector, the pension system has two tiers: an earnings-related public pension and mandatory occupational schemes, based on a points system. The public scheme also has a without means test minimum contributory pension (minimum contributif). In addition there is a targeted minimum income for the elderly (minimum vieillesse).

Germany

The statutory public pension system has a single tier and is an earnings-related PAYG system. Calculation of pensions is based on pension points. There is a social-assistance safety net for low-income pensioners.

Greece

Pensions are provided through an earnings-related public scheme with two components plus a series of minimum pensions/social safety nets.

Hungary

The new system combines an earnings- related public pension with mandatory fully funded defined-contribution schemes. This applies to new labour- market entrants and people aged 4 or under at the time of reform. Older workers could choose between this mixed system or a pure pay-as-you-go, public pension. The modelling assumes that workers are covered by the mixed system.

Iceland

The public pension has three components, including a basic and two income-tested schemes. There are also mandatory occupational pensions with a hybrid (albeit mainly defined-benefit) formula.

Ireland

The public pension is a basic scheme paying a flat rate to all who meet the contribution conditions. There is also a means-tested pension to provide a safety net for the low-income elderly. Voluntary occupational pension schemes have broad coverage: over half of employees.

Israel

The state pension comprises a universal insurance pension combined with means-tested income support. Until 2008 second-pillar pensions were common, but voluntary. As of January 2008 mandatory contributions to defined-contribution pension funds have been introduced.

Italy

The new Italian pension system is based on notional accounts. Contributions earn a rate of return related to GDP growth. At retirement, the accumulated notional capital is converted into an annuity taking account of average life expectancy at retirement. It applies in full to labour- market entrants from 1996 onwards.

Japan

The public pension system has two tiers: a basic, flat-rate scheme and an earnings- related plan (employees' pension scheme).

Korea

The Korean public pension scheme was introduced relatively recently. It is an earnings-related scheme with a progressive formula, since benefits are based on both individual earnings and the average earnings of the insured as a whole.

Luxembourg

The public pension scheme has two components: a flat-rate part depending on years of coverage and an earnings-related part. There is also a minimum pension.

Mexico

Old-age pensions are covered under a defined-contribution scheme mandatory for private sector workers, privately managed and funded. The contributions are made by workers, employers and government. There is a minimum pension for those who listed at least 24 years.

Netherlands

The pension system has two main tiers, consisting of a flat-rate public scheme and earnings-related occupational plans. Although there is no statutory obligation for employers to offer a pension scheme to their employees, industrial-relations agreements mean that 91% of employees are covered. These schemes are therefore best thought of as quasi-mandatory.

New Zealand

The public pension is flat rate based on a residency test. The KiwiSaver, an auto-enrolment defined-contribution private retirement savings scheme with capped public subsidies was introduced in 2007. Employed KiwiSaver members were estimated to be over 30% of the workforce by the end of 2008.

Norway

The new public pension system, beginning in 2011, will consist of an income pension, and a guarantee pension for people with no or only a small income pension. The guarantee pension is income-tested against the income pension.

In 2006, a mandatory occupational pension was introduced in the private sector.

Poland

The scheme is based on a system of notional accounts. People under 30 (born in 1969 and after) at the time of the reform must also participate in the funded scheme; people aged 30-50 (born between 1949 and 1968) could choose the funded option. However, the choice had to be made in 1999 and it was irrevocable, with the exception of those who could retire early.

Portugal

Portugal has an earnings-related public pension scheme with a means-tested safety net.

Slovak Republic

The earnings-related, public scheme is similar to a points system, with benefits that depend on individual earnings relative to the average. Low-income workers are protected by a minimum amount of earnings on which pension is calculated. All pensioners are eligible for social assistance benefits. Defined- contribution plans were introduced at the beginning of 2005.

Slovenia

There is an earnings-related pension with a minimum pension. There is a social-assistance scheme for low-income pensioners.

Spain

The Spanish public pension system consists of a single, earnings-related benefit in the contribution level, with a means-tested minimum pension. There is also a non-contribution means-tested level, which replaces the previous special social assistance scheme.

Sweden

The earnings-related part is based on notional accounts and there is a small mandatory contribution to individual, defined-contribution funded pensions.

There is also a pension-income-tested top-up. Occupational pension plans – with defined-benefit and defined-contribution elements – have broad coverage.

Switzerland

The Swiss pension system has three main parts. The public scheme is earnings related, but has a progressive formula. There is also a system of mandatory occupational pensions and an income-tested supplementary benefit.

Turkey

An earnings-related public scheme with an income-tested safety net and a flat-rate supplementary pension.

United Kingdom

The public scheme has two tiers, (a flat-rate basic pension and an earnings-related additional pension), which are complemented by a large voluntary private pension sector. Most employee contributors “contract out” of the state second tier into private pensions of different sorts. An income-related benefit (pension credit) targets extra spending on the poorest pensioners.

United States

The publicly provided pension benefit, known as social security, has a progressive benefit formula. There is also a means-tested top-up payment available for low-income pensioners.

Argentina

The pension system has two main components: a basic component and an additional social insurance component. For those aged 70 and above there is also an additional age-related social insurance component, as well as a social assistance component.

Brazil

The Regime Geral de Previdência Social (RGPS), covers the private sector workforce. It is financed through payroll taxes, shared by the employer and the employee, revenues from sales taxes and federal transfers that cover shortfalls

of the system. It is a mandatory, pay-as-you-go financed single-pillar scheme, which is operated by the National Social Security Institute.

China

China has a two-tier pension system, consisting of a basic pension and a mandatory employee contribution to a second-tier plan. This system, which was introduced in 1998, was significantly revised in 2006. It covers urban workers and many of the parameters depend on province-wide (rather than national) average earnings.

India

Workers are covered under the earnings-related employee pension scheme and defined-contribution employee provident fund administered by the Employees Provident Fund Organisation (EPFO) and other employer managed funds.

Indonesia

Employees in private sectors are covered by a defined-contribution plan.

Russian Federation

The pension system has different components: labour pensions, state pensions, and voluntary pension savings at non-state (private) pension funds.

Saudi Arabia

Employees in the public and private sectors. Voluntary coverage for persons who are self-employed, are working abroad, or no longer satisfy the conditions for compulsory coverage.

South Africa

The public pension is flat rate based on a residency test. There are also voluntary occupational schemes but coverage for these is not high.

Appendix C. Translated Questionnaire

Explanation questionnaire.

1. The questionnaire consists of three pages.
2. The general questions are asked to determine who participated. This information will not be traceable used in the report.
3. For all questions and answers the reference date is July 1st, 2008, unless otherwise indicated
4. The Yes/No questions need to be answered by ticking one choice.
5. The open questions should be answered as completely as possible. If space is insufficient please use an additional blank sheet with a reference to the question.

General

a. Answered by:	
b. Function:	
c. Name of pension fund	
d. Date:	

Process phase: Availability of data

1. Variable: Information about coverage ratio

Indicator	Answer (When unknown please complete with 0)
a. What was the value of the assets per 1 July 2008	€
b. What was the value of the assets per 1 Oct. 2008	€
c. What was the value of the assets per 1 Jan. 2009	€
d. What was the value of the assets per 1 April 2008	€
e. When 0, why was it unknown?	

Indicator	Answer (When unknown please complete with 0)
a. What was the value of the liabilities per 1 July 2008	€
b. What was the value of the liabilities per 1 Oct. 2008	€
c. What was the value of the liabilities per 1 Jan. 2009	€
d. What was the value of the liabilities per 1 April 2008	€
e. When 0, why was it unknown?	

Indicator	Answer (When unknown please complete with 0)
a. What was the coverage ratio per 1 July 2008	%
b. What was the coverage ratio per 1 Oct. 2008	%
c. What was the coverage ratio per 1 Jan. 2009	%
d. What was the coverage ratio per 1 April 2008	%
e. When 0, why was it unknown?	

f. Was the interest rate risk hedged?	YES <input type="checkbox"/> NO <input type="checkbox"/>
g. Why?	
h. How was the interest rate risk hedged?	
i. For how long was the interest rate risk hedged?	
j. Was contracted when and how the information about the assets and liabilities are disclosed?	YES <input type="checkbox"/> NO <input type="checkbox"/>
k. Who is responsible for the subject liabilities, assets and coverage ratio? (indicate the function)	
l. Where is this documented?	
m. Why was it structured that way?	
n. Since when was it structured that way?	

2. Variable: Pension fund governance

Indicator	Answer
a. Were board committees installed?	YES <input type="checkbox"/> NO <input type="checkbox"/>
b. If YES, which committees?	
c. Was an accountability body installed?	YES <input type="checkbox"/> NO <input type="checkbox"/>
d. Was a review committee installed?	YES <input type="checkbox"/> NO <input type="checkbox"/>
e. Was a members' council installed?	YES <input type="checkbox"/> NO <input type="checkbox"/>
f. Was a supervisory board installed?	YES <input type="checkbox"/> NO <input type="checkbox"/>
g. Was a complaints committee installed?	YES <input type="checkbox"/> NO <input type="checkbox"/>
h. Was the government support in- or external?	INTERNAL <input type="checkbox"/> EXTERNAL <input type="checkbox"/>
i. Which officer is responsible for day to day management?	
j. Did the fund made use of external asset managers?	YES <input type="checkbox"/> NO <input type="checkbox"/>
k. How was the continuity and expertise of the board ensured?	

3. Variable: Default settings

Indicator	Answer
a. Was there a compliance officer?	YES <input type="checkbox"/> NO <input type="checkbox"/>
b. Which officer was responsible for collecting the data for the board meetings?	
c. Did the decision-making process have default settings for:	
➤ Agenda topics?	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Meeting frequency?	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Advance dissemination of meeting documents?	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Meeting quorum?	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Decision-making quorum?	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Communication with (former) participants?	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Where is this documented	
d. Were all meeting topics prepared in writing?	YES <input type="checkbox"/> NO <input type="checkbox"/>
e. Was the topic 'coverage ratio' prepared in writing?	YES <input type="checkbox"/> NO <input type="checkbox"/>
f. Were checklists used for preparation of the meeting?	YES <input type="checkbox"/> NO <input type="checkbox"/>

Process phase: Awareness

4. Variable: Actual situation

Indicator	Answer
a. Which officer, director, board member or committee placed the topic coverage ratio on the agenda of the involved decision-making body?	
b. Was the action based on agreed responsibilities or otherwise?	

5. Variable: Context

Indicator	Answer
Regarding the research period did you think:	
➤ Nothing can happen to us.	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ We will be informed	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Every risk is covered	YES <input type="checkbox"/> NO <input type="checkbox"/>
b. Did time pressure change:	
➤ The accuracy of the decision-making process?	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ The awareness that possibly a decision was needed?	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ The way the situation (financial crisis) was recognized?	YES <input type="checkbox"/> NO <input type="checkbox"/>

6. Variable: Problem recognition

Indicator	Answer
a. Was the coverage ratio due to the situation (financial crisis) recognized as a problem?	YES <input type="checkbox"/> NO <input type="checkbox"/>
b. Did every board member agreed?	YES <input type="checkbox"/> NO <input type="checkbox"/>
c. Was there a need for a recovery plan?	YES <input type="checkbox"/> NO <input type="checkbox"/>

Process phase: Analysis

7. Variable: Meeting preparation

Indicator	Answer
a. Who proposed the goal of every board meeting?	
b. Who proposed the agenda for the board meeting?	
c. Were alternatives gathered in preparation for the meeting?	YES <input type="checkbox"/> NO <input type="checkbox"/>

8. Variable: Meeting

Indicator	Answer
a. Were during the meeting:	
➤ Goals set per agenda topic?	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Were alternatives explained?	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Did this happen during the research period for the topic coverage ratio as well?	YES <input type="checkbox"/> NO <input type="checkbox"/>

Process phase: Action

9. Variable: Decision-making

Indicator	Answer
a. Were the decisions in writing?	YES <input type="checkbox"/> NO <input type="checkbox"/>
b. Were the decisions communicated to (former) participants?	YES <input type="checkbox"/> NO <input type="checkbox"/>
c. Did the (written) decision cover who should execute?	YES <input type="checkbox"/> NO <input type="checkbox"/>
d. If NO, why not?	
e. Did the (written) decision cover who should monitor the execution of the decision?	YES <input type="checkbox"/> NO <input type="checkbox"/>
f. If NO, why not?	
g. Did the (written) decision cover who should report?	YES <input type="checkbox"/> NO <input type="checkbox"/>
h. If No, why not?	

10. Variable: Evaluation

Indicator	Answer
a. Looking back, are you satisfied about the decision-making process?	YES <input type="checkbox"/> NO <input type="checkbox"/>
b. Are there lessons learned?	YES <input type="checkbox"/> NO <input type="checkbox"/>
c. If lessons were learned did they lead to the adjustment of:	
➤ Modes of information gathering	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Implemented pension fund governance principles/rules	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Asset management policy	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Hedging the interest risk	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Communication with (former) participants	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Meeting structure	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Meeting frequency	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Meeting process	YES <input type="checkbox"/> NO <input type="checkbox"/>
➤ Outsourcing of services	YES <input type="checkbox"/> NO <input type="checkbox"/>
d. Are checklists currently used for preparing board meetings?	YES <input type="checkbox"/> NO <input type="checkbox"/>

Thank you for taking the trouble and time it took to complete this questionnaire.
With kind regards, Arie Slottje

Appendix D. Definitions of Terms

Action phase: the part of the conceptual research model concerning the decision-making process in which the selection of a course of action among several alternatives is carried out. The output is called the decision.

Actuarial interest rate: It is the interest rate (yield) where pension funds can count up with if they make calculations for the future. The actuarial rate is the yield that the invested pensions are deemed to deliver as a minimum in the future. The actuarial rate is therefore a fictional yield that pension funds used. In 2012 the Ultimate forward rate is used as mandatory standard.

AFM: Netherlands Authority for the Financial Markets. The AFM supervises the financial markets.

Analysis phase: the part of the conceptual research model concerning the decision-making process in which the decision-maker(s) should consider what the required achievement is. To establish it the decision-maker(s) should gather information, compare and evaluate possible options.

AOM: Actuarial and operating memorandum. Pension funds should have a note on the basis of the Pension Act. In the memorandum the following topics should be covered:

1. Internal control system.
2. Administrative organization and internal control.
3. Procedures and criteria for joining the Fund.

4. Entitlements of participants.
5. Risks.
6. Financial design.
7. Financial management resources.

Availability of data phase: the part of the conceptual research model concerning the decision-making process in which data is collected and processed in accordance with the applicable pension fund governance rules and internally agreed procedures and checklists.

Awareness phase: the part of the conceptual research model concerning the decision-making process in which the facts, which are translated into an actual situation are confronted with the context and the tendency to acknowledge a problem.

Control: The aim of control is to identify deviations, which might require corrective action.

Coverage ratio: is the ratio between the assets of the pension fund and the discounted pension liabilities. Other terms are used as well. Examples are: Solvency level and funding ratio

Decision: The product of an interaction between individual's preferences and those of others.

Decision-making: is the process of sufficiently reducing uncertainty and doubt

about alternatives to allow a reasonable choice to be made from among them.

Dissonance: is a tendency for individuals to seek consistency among their cognitions (i.e., beliefs, opinions). When there is an inconsistency between attitudes or behaviors (dissonance), something must change to eliminate the dissonance. Dissonance theory applies to all situations involving attitude formation and change. It is especially relevant to decision making and problem solving (Festinger, 1957).

DNB: Dutch Central Bank. (De Nederlandsche Bank) DNB supervises the financial soundness of financial institutions, including pension funds.

FTK: Financial assessment framework. The FTK is the financial supervisory regime and is part of the Pension Act. The FTK is applicable to the financial position and the financial policy of pension funds and is in force from January 1, 2007

Funding shortfall: A fund whose own funds have fallen below the minimum regulatory own funds has a funding shortfall. It must draw up a short-term recovery plan within two months, outlining how it will eliminate the funding shortfall within three years.

Labour Foundation: Consultative body of employers and employees in the Netherlands.

Mission: Defines the fundamental purpose of an organization succinctly describing why it exists and what it does to achieve its vision.

Problem: is an opportunity for improvement or growth. It is the difference between the current state and the goal state. It can result from new knowledge or thinking. A problem results from the recognition of a present imperfect and the belief in the possibility of a better future (Harris, 1998).

Problem recognition: is "...a process in which, interactively, we name the things to which we will attend and frame the context in which we will attend to them" (Weick, 1995).

Process: a set of linked activities that take an input and transform it to create an output (Johansson et al., 1993).

Reserve deficit: situation in which a pension fund has fallen below the regulatory own funds but is still above the minimum regulatory own funds (105%). Pension funds, which are in a situation of reserve deficit, must draw up a long-term recovery plan within three months, outlining how it will eliminate the reserve deficit within fifteen years with a steady recovery.

Strategy: a combination of the ends (goals) for which the organization is striving and the means by which it is seeking to get there.

Vision: outlines what the organization wants to be, or how it wants the world in which it operates to be.

Appendix E. Interview Ad Verbatim

I: Dit is het interview dat gehouden wordt op 22 februari met een respondent van de deelnemende organisatie # 1. Ik heb een aantal vragen voorgelegd en we zullen aan de hand daarvan de beantwoording helder trachten te krijgen wat de status is en wat we daarmee gaan doen. Beste respondent, om te beginnen, de juistheid van de bevindingen. Ik heb u een lijst met bevindingen toegestuurd, ik ben begonnen met de onderzoeksvraag, en vervolgens de onderzoeksdoelstelling, en de gebruikte documenten, de gebruikte documenten die heb ik van u gekregen. En het procesmodel, dat is als het ware de basis waarlangs de questionnaire ook is opgesteld. En, wat ik nu dus doe is eigenlijk per fase in het procesmodel nagaan wat zijn de feiten die ik heb vastgesteld aan de hand van de questionnaires en alle documentatie, en dan kijken: herkent u zich daarin, ja of nee. De bevindingen, of de beschikbaarheid van de gegevens, dit is het eerste deel van het procesmodel. In het procesmodel komen drie elementen aan de orde. Dat is informatie over de dekkingssgraad, pension funds government, regels, en over de default settings, met andere woorden: zijn er vaste procedurele afspraken over hoe wij omgaan met agenda onderwerpen die tijdens een bestuursvergadering behandeld dienen te worden. Als ik kijk over het eerste deel, de informatie over de dekkingssgraad. Uit de questionnaires is mij gebleken dat vijftig procent van de 44 gegeven antwoorden (er waren 22 vragen, dus als twee mensen antwoorden heb ik er 44 vragen gesteld), niet gelijkluidend zijn beantwoord.

R: Dus dit gaat over de kwestie die eerst bij ons behandeld is?

I: Ja. Klopt. Die zijn niet gelijklopend beantwoord. Dus dat betekent dat eigenlijk de data waarop u uiteindelijk iets moet gaan besluiten, dus de feiten, over de liquiditeiten, de feiten over de verplichtingen, eigenlijk verschillend zijn beantwoord.

R: Dat verbaast me wel.

I: Het verbaast u. Kunt u een reden misschien verzinnen, van nou het zou misschien daardoor kunnen komen? Want mij is duidelijk geworden dat in een van de questionnaires stond: het onderwerp dekkingsgraad is eigenlijk geen onderwerp dat op de agenda komt omdat het nou ja, wij hebben dat vanaf 2006 niet meer op de agenda gehad, als onderwerp. Ja en dan is daarmee ook het onderwerp wat is de waarde van de verplichtingen en wat staat er tegenover als waarde van zeg maar de assets. Ja dat is dan eigenlijk informatie waarnaar we dan eigenlijk niet echt op zoek zijn gegaan.

R: Dat begrijp ik niet helemaal. Je zegt: vijftig procent van de antwoorden zijn niet anders, dus mijn antwoorden zijn anders als die andere, dat zeg je eigenlijk, he?

I: Klopt.

R: Dat moeten we even kijken welke antwoorden dat dan zijn, want dan kunnen we even kijken wat het kan zijn, want op zich vind ik dat wel apart.

I: Ik leg hier voor de twee questionnaires die ik heb. Ik geef vervolgens aan de bedragen die erin staan.

R: Oh wacht even je bent hier, daar.

I: Ziet u? (wijst verschillen en gelijkenissen aan) U ziet bijvoorbeeld bij deze vraag, ja of nee. U ziet, dit zijn gewoon verschillen die ik dus aantref, wat betekent dat voor mij is dit eigenlijk een verschil in de feiten. Want het moet eigenlijk aanduidbaar zijn: dit is het. En wanneer twee bestuursleden twee verschillende cijfers hebben, dan kun je ook zeggen: ja, heeft de één een andere bron dan de ander. Begrijpt u?

R: Ja.

I: Nou, en aangezien ABTN voorschrijft wat de bron moet zijn, denk ik, nou ja, bijzonder. Dus dat is wat ik heb vastgesteld.

R: Nou daar moeten we gewoon even naar kijken wat daar in zit. Kijk als ik naar de percentages kijk, die cijfers die kloppen voor mij allemaal wel. De dekkingsgraad vind ik apart, daar ga ik nu even meteen naar kijken.

I: Maar goed, dit is dus de basis op grond waarvan ik dus gezegd heb,

R: De andere Respondent is al een tijdje bestuurslid, ik ben nu manager pensioenfonds, en in die periode ben ik ziek geweest, dus ik heb misschien ook niet alle informatie in die tijd... Ik heb ook met name gekeken naar hoe het er nu een beetje uit ziet, dus daar kunnen wel verschillen in zitten. Dus daar zal

verschil in zitten, en nou ja de cijfers die moeten kloppen dus daar wil ik nog even naar kijken. Want ik ga er van uit dat we dezelfde informatie gekregen hebben.

I: Dan, op grond van de ABTN zou de beleggingscommissie elke maand een asset management report ontvangen, dat was op dat moment nog niet geoperationaliseerd. Er staat in bestuursverslagen dat er, ik geloof dat Diederik de opdracht had gekregen, samen met hoe heet hij van asset management, de inhoud van het rapport te gaan bepalen. Dus dat was op 1 juli, nog niet geoperationaliseerd.

R: Dat weet ik niet, daar moet ik nog even naar kijken. Wat we wel gedaan hebben, volgens mij hebben we altijd een maand rapportage gehad. Daar waren we niet altijd tevreden over, dus we hebben dat gewoon verbeterd.

I: U heeft dus wel een maandrapportage ontvangen, alleen de inhoud vroeg om verbetering.

R: Zo zijn we continu aan het verbeteren geweest.

I: Zo van, kijk, wat is nou de beste vorm waarin we dit kunnen presenteren, zodat we met zijn allen over dezelfde informatie beschikken. Uitstekend.

R: Wacht even. De informatie is altijd hetzelfde geweest, iedere keer hadden we dezelfde informatie, alleen we waren niet altijd tevreden over de inhoud van de rapportage zelf. Over de analyse en zo, daar hebben we verbeteringen in aangebracht. De cijfers die in de rapportage waren die waren eenduidig.

I: Vervolgens heb ik gekeken, en er waren geen contractuele afspraken met de verzekeraar, om de som van de verzekerde verplichtingen, maandelijks op te leveren.

R: Ja, dat kan.

I: Nou dan pension funds governance, dat was het tweede onderdeelje, dat

was deze.

R: Wat je nu wel ziet, we hebben een behoorlijke professionele slag. In het verleden ben ik bestuurder geweest, nou, ik ben in de periode eind 2008 was ik er niet, want ik was geopereerd, dat heb ik allemaal niet helemaal meegemaakt. Daarvoor ben ik manager geworden, en twee jaar geleden ben ik begonnen met verbeteringsslag, professionalisering. En dat is natuurlijk nu redelijk goed gelukt, dat zie je nu gebeuren. Dat wil overigens niet zeggen dat we op dat moment risico's liepen, want als je kijkt naar de kennis en de kunde van het bestuur dan is het dermate dat je ... laat ik het zo zeggen: we hebben wel het gevoel gehad dat we onder een kantoor zaten.

I: Ja kijk, het is natuurlijk de core business van het bedrijf.

R: Ja maar wat je nu wel ziet is dat de Nederlandse bank die gaat veel meer eisen stellen, en daar hebben we ook heel snel op geanticipeerd. En daarom zie je misschien dat er in de beantwoording, dat daar misschien wel verschillen instaan.

I: Oke. Kijk, ik denk dat met een ..

R: Kijk dat is dan ook het lastige van het onderzoek, dat had ik me niet gerealiseerd, dat het over een periode ging van twee jaar geleden. Ik heb het ingevuld zoals het er nu een beetje eruit ziet.

I: Ja, ja, oke. Nou goed, kijk, ik denk dat kijkend naar wat ik heb aangetroffen, en ook kijkend naar wat ik ook in de andere documentatie heb aangetroffen, was bijvoorbeeld de ABTN, daaruit zijn wel een aantal dingen te concluderen. Maar de conclusies die ik aan het einde van de rit kan trekken, die zijn zeg maar op geen enkele wijze een aanval op de kwaliteit en de prestatie die heb pensioenfonds heeft gedaan. Integendeel, ik denk dat het pensioenfonds naar het beste kunnen en ook naar het beste weten, de kennis van dat moment ook in aanmerking nemend, want niemand had een dergelijke val van en de rente en de aandelenbeurzen eerder meegemaakt. Dus met de kennis van toen,

moet ik zeggen dat er heel erg goed gereageerd is Daarbij komt, en dat is het derde punt, dat het matchen van het renterisico, met de matchingsportefeuille tot 90%, dan denk ik gewoon een hele goede keuze geweest is van het fonds.

r: In 2006 hebben ze dat in gang gezet.

I: Ja. En nou ik merk dat het matchen van het renterisico, wanneer meer fondsen dat gedaan zouden hebben, en dat hoeft niet tot de 100 procent maar als je maar ergens in de bandbreedte tussen de 90 of misschien 95, 100 zou zitten, prima. Dan had je niet de ellende gehad die je op dit moment hebt.

R: Nee. Maar dat hebben we ook zelf wel geconstateerd.

I: Kijk, en dat het matchen geld kost, prima. Dat is dan maar zo.

r: Ja, wacht even. Wat ik daar nog wel bij wil zeggen is, we zijn als eerste begonnen, stel dat iedereen dat tegelijkertijd gedaan had, dan was het heel anders geweest, misschien veel duurder. Dan had je dat misschien niet zo kunnen doen. Zo moet je het ook wel weer een beetje zien.

I: Ja.

R: Kijk, het feit dat wij als eerste zijn geweest, daar hebben we heel veel profijt van gehad. Maar van de andere kant denk ik, stel dat iedereen dat gedaan had, dan hadden we dat niet voor elkaar gekregen, om alles voor 90 procent te matchen.

I: Nee, dat denk ik ook niet.

R: Nee maar sterker nog, volgens mij heb je dan niet voldoende onderpand om dat te doen. Ja, dat kan ook een conclusie zijn, he?

I: Ja, maar nogmaals, ik denk dus dat het matchen dat gewoon heel erg goed is geweest.

R: Ja, voor ons is dat perfect geweest. Dat zeggen we ook naar mekaar, dat we daar ook heel gelukkig mee zijn geweest. En dat zie je dan ook toch terug in je huidige dekkingsgraad, kijk wat er is gebeurd: onze dekkingsgraad is omlaag gegaan in de afgelopen twee, drie jaar. Maar dat is met name veroorzaakt door het lang leven risico, dat heeft tien procent gescheeld. En de beleggingen zijn wat omlaag gegaan, dat is zelf al vijf procent. Maar qua rente hebben we daar misschien een paar procent op verloren, niet meer dan dat, de afgelopen drie jaar.

I: Nou kijk, maar daarom zeg ik, terugkijkende naar ook de conclusies die ik uiteindelijk zou willen trekken, betekent het dat, en ik kijk er dan gewoon fase gewijze naar, vanuit het proces model, dat ik zeg van nou in de eerste fase daar had het beter kunnen gaan wanneer er op zeg maar gelijkwaardige feiten besluitvorming tot stand was gekomen.

R: Nee wacht even, even twee dingen. Kijk wat we nu gedaan hebben, ik heb het ingevuld op basis van dingen drie jaar geleden, dus dat er nu wat andere data is gepresetteerd, dat wil ik wel uitzoeken. Ik bedoel, op dat moment, toen de besluitvorming tot stand kwam, toen is wel op basis van dezelfde informatie ... Dat wil ik wel even aangeven.

I: Ja, ja, precies.

R: Want het zijn wel twee hele verschillende dingen die we nu proberen te concluderen.

I: Ik ben het met u eens wanneer u zegt, toen wij in 2006 een besluit namen toen hebben we dat genomen zeer weloverwogen en gebaseerd op de echte feiten. Dat wil ik heel graag meenemen.

R: Nee, maar dat is ook zo.

I: Het tweede is, ik kijk nu naar de verschillen die ik nu aantref in de questionnaires, en dan kan ik alleen maar feitelijk vaststellen dat er verschillen

zitten in de antwoorden. Ik kijk dus niet naar de reden van het waarom dat ik die verschillen zie, maar ik kijk naar de verschillen. En die verschillen die heb ik gewoon geconstateerd.

R: Nee, dat kan. Maar die conclusie is dat het dan op basis van verschillende informatie.

I: Nee, maar dat hoor je mij ook niet zeggen.

R: Nee, dat vind ik wel belangrijk.

I: Als ik kijk naar pension funds governance, de verschillende lichamen die door pension funds governance regels van ons worden gevraagd, die waren er. Verantwoording, visitatie, dat soort commissies allemaal. Alleen ze hadden nog niet gewerkt, of het idee was er en de mensen waren al benoemd, maar dan is de volgende fase aan de orde.

R: Nee maar kijk dat is heel simpel, volgens mij is de Pensioenwet in 2007 pas tot stand gekomen. Op basis daarvan zijn we inderdaad begonnen met een governance structuur neer te leggen. Toen hebben we ook een deelnemersraad geïnstalleerd. Dat werkte voor geen ene meter. Dat kan je gerust zeggen, de deelnemersraad zegt dat ook. Dat heeft ook met de communicatie te maken van de mensen die daar... En inmiddels is dat gemoderniseerd, sterker nog, nu vindt ook de deelnemersraad van nou jongens, ik denk dat we goed bij mekaar dingen doen. Dus ook daar is een evaluatie.. kijk op een gegeven moment krijg je de Pensioenwet, vervolgens is gezegd van nou jongens wat moeten we daarmee, en toen zijn wat dingen verzonnen, om de Nederlandse bank een beetje te pleasen. Of tenminste, uiteindelijk ook voor onszelf natuurlijk. En vervolgens ben je gaan kijken van hoe werkt dat nu, nou op dat moment met de deelnemersraad dat ging voor geen meter. Zelfs ruzie is er ontstaan, uiteindelijk. Toen is de deelnemersraad afgetreden, ook, en vervolgens is er een nieuwe deelnemersraad ontstaan. En een van de dingen die ik opgepakt heb is normalisatie met de deelnemersraad, en dat is gewoon heel goed gelukt. De voorzitter van de deelnemersraad die is

inmiddels net afgetreden, die was de laatste twee jaar.. en zo moet het ook werken. Dan zie je gewoon ook dat, als je kijkt naar de visitatie commissie, die hadden we ook helemaal niet. Die heb ik in 2009 operationeel gekregen, en in 2010 is de eerste visitatie commissie geweest.

I: Nou, ik ben me er heel goed van bewust dat in januari 2007 de Pensioenwet van start ging, dat alles wat in de regelgeving staat, niet op stel en sprong gerealiseerd is. Daar heeft de wetgever ook een aantal overgangstermijnen voor gegeven, voor het pensioenfonds en ook voor herverzekerde contracten. Dat begrijp ik, dat weet ik. Het enige wat ik nu dus vaststel is, en dat heb ik hierin gedaan, de bodies, de lichamen die vereist werden door de wet, en de pension funds governance rules, die waren er, alleen doordat ze er pas waren hebben ze zich het bestaan nog niet kunnen waarmaken en weet je ook niet hoe het in de praktijk heeft gewerkt.

R: Nee, maar dat is een conclusie.

I: Ja, dus oké, dat klopt.

R: Ja.

I: Dan kijk ik naar de default settings, de default settings dat is waaraan we een aantal dingen vast hebben kunnen leggen, nou de vergaderfrequentie, het van te voren distribueren van de vergaderstukken en het besluitvormingsforum, dat zijn de default settings die door de respondenten zijn herkend. Vervolgens is ook vastgesteld dat er geen checklist in gebruik is wat betreft het besluitvormingsproces. Een checklist zou bijvoorbeeld kunnen zijn, agenda, punt genoteerd, stukken gedistribueerd, ook alternatieven aangeleverd, kortom: een checklist van afvinken, zit alles erbij? Prima, dan gaan we dus beslagen te ijs de discussie in. En dat is eigenlijk, zeg maar, de doelstelling van een checklist in deze fase. Dat je gewoon weet van nou is iedereen op de zelfde wijze geïnformeerd zodat we ook op dezelfde wijze met elkaar in discussie kunnen gaan over dezelfde data.

R: Dat gebeurt dus in principe want we hebben gewoon een. alle bestuursstukken die worden genummerd, en ieder bestuurslid krijgt dezelfde stukken, eigenlijk.

I: De vraag is alleen, dat wanneer een besluit aan de orde is, of dat dan alle informatie die bij een dergelijk te nemen besluit hoort te bestaan, bijvoorbeeld: ik moet weten wat de waarde van de beleggingen is, om het even hiernaar terug te halen, is dat er dan bijgevoegd. Nou dat is eigenlijk zeg maar de waarde van een checklist in dat stadium.

R: Ja, maar dan ga je even te ver, kijk een checklist die is natuurlijk heel lastig. Je moet uiteindelijk als je kijkt wat je wel ziet is je krijgt wat discussie en op een gegeven moment dan zie je dat sommige stukken terug ingebracht moeten worden, voor het feit dat we gewoon de informatie niet altijd volledig voor handen was. Dus daar wordt wel degelijk over gecommuniceerd. We hebben een visitatiecommissie gehad, en daar stond onder andere dat met name de besluitvorming was niet altijd honderd procent goed genotuleerd of .. nou daar hebben we ons aan aangepast. We hebben nu een checklist voor hoe je besluitvorming vastlegt in de notulen. Dat hebben we inmiddels ook geregeld.

I: De besluitvorming vastleggen in de notulen, dat is een actiepoint dat u heeft gedaan onder begeleiding van het verslag van de visitatie. En wat is daar anders aan dan wat er was?

R: Dat heeft vooral met het professionaliseringsverslag te maken, van het besluitvormingsproces van het bestuur. De totstandkoming van het beleid: Om het besluit het beter vast te leggen gaat het MT de volgende activiteiten opvolgen, de besluiten in de notulen van de specifieke vast te leggen en te accentueren, de besluiten op nemen van elk te nemen besluit met de gewone informatie, besluit bewegingen gevolgen. En zo hebben we dat gedaan. Dat heeft ook te maken met het professionaliseringsslag.

I: Zou ik hier een kopie van mogen hebben van je?

R: Dat mag je hebben, ja.

I: Oh, dank u wel, zeg. Dat is echt fantastisch. Nou, kijk, dit is dus..

R: Op die manier zijn we dus.. Kijk, u ziet dus, de reden dat ik nu hier ook zit, ondanks die handicap, is dat er ook een andere wind moest gaan waaien. We hebben de afgelopen twee jaar een behoorlijke slag gemaakt om ook dingen vast te leggen. Dat wil niet zeggen dat het in het verleden niet goed ging, laten we dat voorop stellen, maar die vraag die u nu stelt, die hebben we wat minder goed geregeld, en dat hebben we nu inmiddels wel gedaan.

I: Nou, kijk, dat is wat ik uiteindelijk dus ook zal zeggen, ook met betrekking tot de case. Wat ik dus zie is dat er best wel, zo nu en dan, wat op en aanmerkingen zijn te maken, maar door de bank genomen, is het gewoon verdedigbaar, datgene wat er gebeurd is.

R: Ja, maar dat is absoluut waar.

I: Dat is het eerste, de besluitvorming is verdedigbaar. Het tweede, zit er ruimte voor, en dan noemt u het zelf professionalisering, en dat vind ik eigenlijk wel een goede duiding daarvoor: is er ruimte om verder te professionaliseren? En ja, er is ruimte om te professionaliseren, zeg ik op 1 april 2009, want dat is de data die ik beschikbaar heb. En dat is eigenlijk ook wat u constateert en ook zegt waar ik me de afgelopen twee jaar druk mee bezig gehouden hebt. En dat is dus eigenlijk de conclusie die ik dus trek over alle bevindingen die ik uit de questionnaires en alle documentatie heb kunnen halen is: ja, er is ruimte voor verbetering, twee, ja de besluitvorming is verdedigbaar, drie, is er ruimte voor die verbetering en hoe noemen we die dan. En op welke punten. En als u dan zelf aangeeft van nou kijk eens, zo hebben we dit bijvoorbeeld gedaan, dan zeg ik van, nou ja, petje af. Ik vind dat erg knap.

R: Dat geeft ook inderdaad aan dat het bestuur bereid is om daar ook in te investeren en dat ook beter te maken.

I: Nou, dat is een ander aspect. Hoewel ik in het begin zei van nou ja, wat een heel erg open organisatie, dat weet ik niet, dat heb ik niet uit alle documentatie kunnen halen. Maar als je nu dan ziet dat het bestuur ook de bereidheid heeft die professionalisering slag door te maken en ook zich zelf een spiegel voor te houden, in tegenstelling tot het bestuur in de andere case waar ik dus tegen dingen aanloop waar er niet eens wordt gereflecteerd naar de externe adviseurs toe of het wel of niet goed is. Dan zei ik van ja, sorry, dan gaat het echt om gedrag van mensen, en welke regel dat je er ook voor op schrijft, doet niets af aan het gedrag van die mensen. En die mensen: je hebt ze zo ver, of zijn nooit zo ver. Nou en hier, bij dit fonds is het zo, dus het fonds waar we hier over praten, in deze case, dat die bereidheid er kennelijk wel is. En op het moment dat dit dan ook gebeurt, moet ik ook zeggen, petje af. Ik vind dat gewoon heel knap dat dat gebeurt. Want nogmaals, je moet niet vergeten te kijken naar de onderzoeksperiode die een hele tijd terug is.

R: Maar we hebben toch ook een voorbeeldfunctie, we adviseren andere pensioenfondsen, dus we moeten ons zelf goed gedragen, zo heb ik het altijd zelf ook gepromoveerd...

I: Je zet het neer voor de promotie, omdat je dus wilt dat: kijk eens, als ik een voorbeeld functie heb, kijk maar naar mij dan kun je daar misschien nog iets van leren. Nou en ik vind dat dus erg goed, en het tweede wat ik goed vind is dat je niet alleen de regelgeving leidend laat zijn voor je handelen maar dat je dus ook zoals een visitatie commissie zegt: van joh je moet iets doen om in de vastlegging , welke regelgeving dan ook staat het niet hoor, maar als je er dan toch toe over gaat, dan denk ik van dan ben je ook bezig met iets als gedragsverandering te realiseren.

R: Daarom is de visitatiecommissie er ook. Als ze gewoon goede opmerkingen hadden, en dat hadden ze ook, dan moet je dat gewoon doen. Omdat ik dat zelf ook gewoon belangrijk vind, kijk dat is heel simpel: je kunt een heleboel besluiten met z'n allen, maar uiteindelijk gaat het er ook om waar de buitenwacht naar kijkt. En dat moeten we gewoon heel goed vastleggen. En dat vind ik ook als manager gewoon heel erg belangrijk, en ook als bestuurder.

I: Dan pak ik deze vast eventjes erbij. Dan kijk ik naar het volgende onderwerp. Als ik verderga naar die samenvatting van al die bevindingen. Het zou kunnen zijn dat er mogelijk vooroordelen zouden kunnen bestaan, dat zit in dit onderdeelje. Als je hier dus weet van nou we zullen iets moeten doen met die dekkingsgraad, nou dan heb je hier de antwoorden als: is er sprake van een illusion of control. "Is er tijdens de onderzoeksperiode ooit gedacht, ons kan niets gebeuren?" Ja, nee. De ander: "zijn alle risico's al gedekt?" De een zegt ja, de ander nee.

R: Dit ben ik denk ik dan? Of niet? Dan ben ik wel zeer benieuwd want dat weet ik ook niet meer.

I: Nee, dit bent u.

R: Oke.

I: "Ons kan niets gebeuren of alle risico's zijn afgedekt." En dit bedoel ik dan met een vooroordeel, het kan dus zijn dat als je dan denkt van: ons kan niets gebeuren..

R: Dan heb ik een black-out, want als ik dat zelf gezegd heb dan is dat.. dan klopt dat niet. Ja dat zou ik nu anders ingevuld hebben. En dat meen ik echt.

I: Ja, u ziet het. Kijk wat ik gedaan heb, is nogmaals dat ik me heb beperkt tot de feiten.

R: Nee, u heeft gelijk, maar dan heb ik dat zelf gewoon niet goed gedaan. Want we hebben al gezegd van als 'de wereld omvalt' , er kan best een hoop nog gebeuren. En we hebben niet alle risico's afgedekt, we hebben de rente risico's afgedekt, maar de aandelen risico's hebben we bijvoorbeeld niet afgedekt.

I: Dus niet met opties?

R: Nee. Dus ja, dan heb ik denk ik een black-out gehad. Ik ben juist altijd heel voorzichtig, en ik zou niet zeggen dat ons niets kan gebeuren.

I: Ja maar dat is dus ook de functie van dit gesprek, dat we gewoon even nalopen van nou, ja..

R: Nee, maar dat is dus niet zo.

I: Prima, dan zal ik die commissie..

R: Ja, die zou ik wel even doen, ja.

I: Oke. Op basis van deze feiten had ik de conclusie getrokken, er kunnen dus vooroordelen bestaan, van nou ja, ons kan niets gebeuren, terwijl een ander denkt, nou van alles kan ons gebeuren. Nou dan heb je een voordeel want waar heb je het nou over. Dus dan, dat je tijdens de vergadering er ook heel anders in zit.

R: Nou, dat is bij ons niet echt het geval. Dat heb ik echt verkeerd ingevuld, dan weet ik niet wat er toen gebeurd is.

I: Prima. Wat ik doe is, ik probeer hier de conclusie aan te passen in verband met incorrectheid van de gegeven antwoorden.

R: Ja, want juist het bewust zijn, dat wordt ook in het bestuur besproken. En iedereen zit er altijd honderd procent hetzelfde in. Maar dat wordt wel besproken, en uiteindelijk kom je wel tot een eenduidig besluit.

I: Ik leg het daarom ook maar gewoon zo op tafel, zo van, dit is wat ik gevonden heb. Ik ben dus verder gegaan vanuit die aanname dat er dus kennelijk vooroordelen zijn. En dan trek ik in de volgende fase de conclusie, van, ja, door die vooroordelen is het mogelijk dat de vergadering ineffectief en inefficiënt verloopt. Omdat de gevoelens die bij de mensen in het lijf zitten..

R: Maar inderdaad, bij ons het gevoel dat anders is, af en toe heb je dat wel. Maar niet in die mate. En we hebben eigenlijk nog nooit geconstateerd dat we daardoor niet uit de besluitvorming kwamen of dat het heel lang geduurd heeft. Omdat we eigenlijk op dezelfde lijn zitten. Kijk, wat je wel een beetje ziet is dat de een voorzichtiger is dan de ander. En wat je ook wel ziet is dat we het eigenlijk toch wel redelijk goed voor elkaar hebben, misschien moeten we sommige dingen toch wel wat aanscherpen, en dat hebben we uiteindelijk ook wel gedaan door wat maatregelen te nemen. Dus uiteindelijk kom je er wel achter. Dus we hebben er eigenlijk nooit echt een discussie over gehad, dat de een toch een heel andere perceptie had dan de ander. Nee.

I: Oke. Heel goed. Ik zeg u hierbij toe dat ik de conclusie die ik gebaseerd heb op de voorliggende informatie, dat ik die zal herzien naar aanleiding van de wijziging van de informatie. Naar aanleiding van deze aanvulling. Want, ja, het moet wel goed zijn. Ik moet het wel kunnen verdedigen.

R: Nee precies, maar dat moet je ook in je verslag maar even verbeteren.

I: Nee, maar dat is wel wat ik dus ook zal doen. Wat ik ook constateer, en dat is eigenlijk ook wat de visitatie commissie constateerde in de besluitvorming, is dat de beschikbare informatie niet aantoont wie verantwoordelijk is voor de implementatie of de controle van de besluitvorming. En dat is wat eigenlijk het document wat u mij zojuist gaf, aangeeft. Wat is het besluit, wat zijn de beweegredenen, wat zijn de gevolgen voor? En ook, communicatie, en al dan niet adviesplicht. Dus dat betekent dat je dus als het ware meer vastlegt. Wie zijn er bij betrokken, wie gaan het doen, wat moet er gebeuren? Nou en dat is wat ik eigenlijk constateer op dit moment.

R: Dat was minder goed vastgelegd ja, en dat hebben we nu inderdaad geregeld.

I: Ik denk dat dat gewoon hartstikke goed is, want dat was als het ware de samenvatting van de conclusie die ik trok naar aanleiding van alle informatie die ik dus had. Ik trek eigenlijk een conclusie dat de organisatie geen lerende

organisatie is. En dat komt doordat er door de grote verscheidenheid in de antwoorden er dus niet gesproken wordt over de zaken waar men verschillende antwoorden over gegeven heeft. Dat betekent zoveel als: een lerende organisatie, dan deel je alles wat je hebt, en dan kan men het oneens zijn maar dan nog kan er een besluit genomen worden waarvan er de volgende keer gezegd wordt van oh ja, hoe hadden we het de vorige keer ook al weer gedaan.

R: Maar die conclusie mag je ook niet trekken.

I: Nee want omdat als je dit dus gaan veranderen..

R: Nee, maar wacht even. Wat er gewoon gebeurd is, dat er vragen zijn neergelegd, waarvan mensen vroegen van ja wat moeten we ermee. En vervolgens zijn die gewoon ingevuld, dat is ook niet afgestemd, normaal gesproken doen ze dat wel. Maar omdat het vrij lang geduurd heeft is dat nooit afgestemd, waardoor er verschillende antwoorden uit komen. Als we dat samen hadden kortgesloten, dan waren er hoogstwaarschijnlijk andere antwoorden uitgekomen. Maar als je nog een keer tijd hebt wil ik daar best nog wel een keer door heen fietsen, dan kan ik nog eens even aangeven hoe het kan dat de antwoorden verschillen. Enerzijds heeft het te maken met de tijdsgeest op dat moment, denk ik. En misschien zijn sommige vragen ook niet helemaal goed begrepen door mij. Met sommige vragen had ik best wat moeite, vooral om te begrijpen: wat bedoel je nou precies. Dit is ingevuld, maar als je kijkt naar mezelf, daar weet ik gewoon van dat alle informatie gewoon op tafel komt, en dat iedereen de zelfde informatie heeft, omdat ze maar een soort informatie hebben.

I: Oke, dat is heel belangrijk. Ik ben deze gelijk aan het noteren.

R: Ja, dit is een hele belangrijke. En daarom zeg ik van nou dan ligt het meer aan de beantwoording of.. dan wil ik daar wel even kritischer naar kijken.

I: Wat ik graag wil doen zijn twee dingen. Dat is een, u ontzettend vriendelijke bedanken voor de tijd die u nu genomen heeft om dit gesprek aan te gaan. En

nummer twee is dat ik graag met u een andere afspraak wil maken om die vragen dan separaat door te nemen, maar dat graag op een ander tijdstip.

R: Ja, dat wil ik wel doen. Dan kan ik even kijken van hoe dat.. Het is niet dat ik naar een antwoord wil toewerken, maar ik wil het wel analyseren en dan kunnen we het daar wel over hebben. Een ding wat ik wel wil zeggen is dat iedereen tijdens de besluitvorming dezelfde informatie heeft. En dat kan ik ook zien aan de informatie die ze aan ons geven, want die is ook vastgelegd.

I: Nou dat is dus wel iets wat ik gewoon noteer, dat bij besluitvorming alle beschikbare informatie op tafel komt. En hiermee wil ik u nogmaals bedanken voor dit gesprek, en een einde aan dit interview maken. En in de tussentijd maken wij even een nieuwe afspraak. Als u dat wilt.

R: Ja.